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See Page 53 October, 1950, Reader's Digest for an interesting story about **Titania**.

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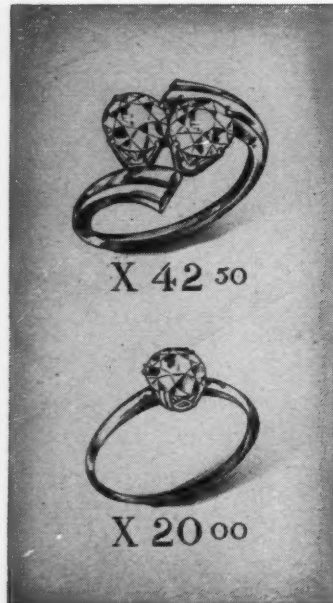
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DESERT CALENDAR

- Feb. 1-4—Open Golf Tournament, El Rio Country Club, Tucson, Arizona.
- Feb. 3-10-17-24—Arizona Daily Sun Classification Races, Snow Bowl, 14 miles north of Flagstaff, Arizona.
- Feb. 4—Round-Up Club's Gold Rush Day, with Don's Travelcade, Wickenburg, Arizona.
- Feb. 4-5 — Annual rodeo, Palm Springs, California.
- Feb. 9-10—Carrot Festival, Holtville, California.
- Feb. 10 — Amateur rodeo, Safford, Arizona.
- Feb. 10-11—Rodeo, Yuma, Arizona.
- Feb. 11—Rodeo, Rancho de los Caballeros, Wickenburg, Arizona.
- Feb. 11—Desert Sun Ranchers' rodeo at Rancho de Los Caballeros, Wickenburg, Arizona.
- Feb. 11 — Don's Trek to Williams Field, Phoenix, Arizona.
- Feb. 11-12 — All Palomino Show, Phoenix, Arizona.
- Feb. 14—Western Saddle Club all-western Stampede, Phoenix, Arizona.
- Feb. 16-18—Valley of the Sun Trap Shoot, Papago Park, Phoenix, Arizona.
- Feb. 16-22—Riverside County Fair and National Date Festival, Arabian Nights Pageant, Horse Show, Indio, California.
- Feb. 17 — Guest Golf Tourney at Wickenburg Country Club, Wickenburg, Arizona.
- Feb. 17-18—Second annual Rock and Gem show of Maricopa Lapidary Society at the Armory, Seventh Avenue and West Jefferson, Phoenix, Arizona.
- Feb. 17-18 — Thunderbird Races at the Arizona Snow Bowl, 14 miles north of Flagstaff, sponsored by the Phoenix Thunderbirds.
- Feb. 18 — Round-Up Club's Safari, Wickenburg, Arizona.
- Feb. 19-25 — Third annual Cactus Show, Desert Botanical Gardens, Phoenix, Arizona.
- Feb. 20—University Observatory open to public, Full moon. Tucson, Arizona.
- Feb. 21-25—California Savings and Loan League convention, Palm Springs, California.
- Feb. 22-25—Annual mid-winter Rodeo La Fiesta de los Vaqueros, Tucson, Arizona.
- Feb. 22-28—Maricopa County Fair, Horse Show, Mesa, Arizona.
- Feb. 22-29—Invitational Golf Tournament, Phoenix, Arizona.
- Feb. 22-Mar. 4—Maricopa County Fair, Mesa Civic Center, Mesa, Arizona.
- Feb. 24-Mar. 4 — Imperial County Fair, El Centro, California.
- Feb. 26-Mar. 17 — Architects Show, Fine Arts Gallery, Tucson, Arizona.



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FEBRUARY, 1951



STORM AT GRAND CANYON

By MILDRED C. TALLANT
Glendale, California

Crags brushed by racing shadows seemed
to stir
Within the Colorado's wild abyss.
Vermilion cliffs receded to a blur

In distance wrought through cloud-swept
artifice,
Then glided forth as for a footlight pause,
As sun rays briefly claimed them for a kiss.

With tears the new day sacrificed her cause.
In fearful drama set to rack the sky,
Sharp lances unsheathed fire and pierced
through gauze

Of mist, to ricochet and let blades fly
At cadmium walls that flinched before the
power
Which awesome echoes massed to verify.

Yet those who hold an inner grace as dower,
Know beauty masters might at such an
hour.

GHOST CITY

By CATHERINE WONDERLY
Culver City, California

Little ghost city, deserted and still,
Nestled away at the foot of the hill,
Basking in silence, beyond care and strife,
Where are the souls that once filled you
with life?
Dreaming in peace of a day that is done . . .
Little ghost city, your short race is run.

High on the hilltop the little church stands;
Once it reached downward with welcoming
hands.
Rusted and silent its silvery chime;
Dim is the trail where men's feet used to
climb.
Never an echo of solacing song.
Little gray church, have the years seemed
so long?

Little red schoolhouse, where children
trooped in,
Gladdening the air with their laughter and
din,
Blank and unseeing your windows now
stare,

Filled to the rafters with hopeless despair.
Crumbling away 'neath the sun's scorching
beams;
Pitiful symbol of unfulfilled dreams.

Tenantless cabins with doors swinging wide,
Black caverns dotting the gray mountain
side—
Tunnels to treasure which men hoped to
gain;
Now, but the graves of the years spent in
vain.
Where is the glory you hoped to accrue?
Little ghost city, I'm sorry for you.

DESERT SUNSET

By LEROY PRITCHETT
Los Angeles, California

The desert sun sets in the west, a golden
ball of fire,
A gem from heaven's treasure chest arrayed
in new attire.
The painted canyon's colored walls reflect
its changing hue,
And place their great enchanted halls on
fairylane review.

A reddish gold soon shades the sky which
once was azure blue;
The work of artists from on high descends
to mortal view.
The dimming sunbeams now give way as
purple shadows fall;
Close to the ridge at first they play then
suddenly grow tall.

With one last beam to kiss the sand,
Goodnight 'til dawn, Adieu;
The sun is gone to take command
Of other skies of blue.

Fight On!

By TANYA SOUTH

Fight bravely on for Truth and Light.
They win who never cease to fight,
And will not recognize defeat,
Whatever bitter Fate or sweet
Attack their spirit. Fight! Fight on—
Exultant o'er your cause! For Truth
Lies not in easy Paths nor smooth,
But in the high crests won.

Evening Primrose

By MIRIAM ANDERSON
San Bernardino, California

In April, the primrose scatters its
fragile white petals, like scraps of torn
tissue over the desert sands. Tightly
furled, it slumbers through the winds
of the morning, the still hotness of
noon, the drowsy lethargy of the full
blown day. When the shadows of af-
ternoon bonnet the mountains with
purple it rouses, and awakening slowly
to the murmur of the yellow flowered
greasewood bush it unfolds in lumin-
ous, shell pink whiteness. Dusk is its
hour . . . Joyously it throws open the
doors of its heart to the first star. It
prays:

Oh Mother sands, my span is short!
Let me give beauty to the night.
Let vagrant winds dip to my caress,
And carry to the heart of night my tender-
ness.

For light too soon will timidly
Reach for the mountain peaks.
The light of stars alone is mine, is mine.
Dawn, hold back!

Hold back the hungry desert life
Whose silent tread would crush my heart.
And hear my plea. Let me commune,
Wind, sand, and stars—a moment more,
with thee.

DESERT VICTORY

By AMY VIAU
Santa Ana, California

I drank from ocean waters in my day
And bore their restless tides upon my breast.
But now my sands are bared beneath the
sun
In thirsty stretches reaching to the west.

I hold my hidden secrets silently,
Armed with an arid vastness against man;
Yet many flowers crest my desert heart
With blooms as fair as those of watered
span.

Beneath night's coolness and a limpid moon
The sage and smoke trees on my bosom glow
Like silhouettes of silver in the night
And make me lovelier than did sea-flow.

Winds born within my bed, and misty hues
Rise forceful and full beauteous when I
choose.

SONNET

By LAUREN FISH
Redwood City, California

King Lear, wrapped brightly in thy snowy
sheet,
We stand in awe before thy massive pile;
For thou in ages gone hath seen the smile
Of limpid blue Lahontan at thy feet.
And now in endless reaches gleams the heat
Of shimmering sands, wind-blown, mile on
mile.
How small the bickerings of kings! How
vile
The pomp of futile wars of men and fleet
Must seem to thee whose own immortal
year
Hath viewed the boundless white-capped sea
depart
And in its stead the naked sands appear,
Vacant and vast. Give us, O God, the heart
That loves; the faith that lives; the tolerance
Of mighty Lear; the patience and endurance.

Black Nuggets in the Valley of Phantom Buttes

Pegleg Smith was a trapper—one of the Mountain Men who came into the West 100 years ago and grub-staked their explorations with beaver pelts.



John Mitchell believes that the Pegleg Smith lost buttes of the black nuggets are located near the point where the eastern ends of the Chuckawalla and Chocolate mountains converge, on the north side of Salton Sea. John is sure they are there because he once found the place and brought away three of the black nuggets. But he did not know until many years later that the manganese-coated stones he picked up were gold. Here is a new version of the legendary Pegleg gold strike.

By JOHN D. MITCHELL

Art work by John Hansen

THE LOST PEGLEG Smith gold mine with its piles of black gold nuggets is one of the celebrated traditions of the great Southwest. Much time and money have been spent and many lives lost in the quest for this fabulously rich gold deposit believed to be located in the heart of the great California desert—the Sahara of America.

For more than a century prospectors and adventurers from every part of the civilized world have searched these waste lands for some trace of the "Lost Valley of the Phantom Buttes" from whence came the many black gold nuggets brought out of the desert by the Indians and the few white men who were willing to gamble their lives against those twin demons of the desert—heat and thirst.

Pegleg Smith, early day trapper, found the deposit while on his way across the desert to the Spanish settlements on the Pacific Coast in the year 1829 to market a cargo of furs. But he was never able to return to it.

Thomas L. Smith was born in 1801 in Garrard County, Kentucky, the son of Christopher Smith, an Irish immigrant who fought in the Indian wars of the Northwest under St. Clair. After varied experiences on the Mississippi River, Smith, at the age of 23, joined a caravan of 80 wagons and 150 men bound for Santa Fe, New Mexico, to trade with the Indians. The caravan fought its way across the great plains then swarming with buffalo and hostile Indians, scaled the Rockies and wound down through the sunset canyons and out onto one of

God's most beautiful stages—the great Southwest. Smith took along several mule loads of goods for his own use in trading with the Indians.

Shortly after arrival in Santa Fe, young Smith joined another large party bound for the Snake and Utah Indian territory. Later this party split up into smaller companies and Smith and his men returned to the Grand River country in Colorado where they became involved with the Indians and Smith was shot in the leg while trying to bring in the body of a dead companion. The heavy arrow shattered the bone of his left leg just above the ankle. Smith borrowed a butcher knife from the camp cook and completed the job. After the wound had been bandaged he was placed on a litter between two mules and carried 150 miles to a Snake Indian village where the squaws nursed him back to health. When the stub leg had healed sufficiently to enable him to get around Smith fashioned himself a wooden leg from an ash tree. Henceforth he was known to his companions and the Indians as Pegleg.

Here amid snowcapped peaks, tumbling waterfalls, quiet lakes and swift running streams the little party hunted wild game, trapped beaver and lived the life of sturdy pioneers. Pegleg and his companions trapped the tributaries of the Virgin and the Colorado down to the junction of the Gila, arriving there in 1829.

Here, on the site of what later became the town of Yuma, Smith and another trapper named LaRue were intrusted with the task of taking a mule train of pelts to the Spanish settlements on the Pacific coast. Ahead of these men lay one of the most arid deserts in the American Southwest—the great Salton Sink.

It was into this no man's land that Pegleg and LaRue plunged with 15 or 20 pack animals loaded with furs and kegs of water. After floundering through the soft sand for days and making dry camps at night, it became increasingly apparent they would never be able to get out of the desert with their heavy loads of furs and the small amount of water they had left. It was decided to cache half of the furs in the sand dunes.

Late one evening Smith and LaRue camped at the base of the Chocolate Mountains near three small black buttes. To get his bearings and if possible locate some green spot where water might be found Smith climbed to the top of the highest butte. On his way down his attention was attracted by some black pebbles that lay scattered over the sides and around the base of the butte. Picking up several of them he found they were very

heavy and put some of them in his pocket. Finally they found their way out through a pass to the northwest and at the foot of a green mountain they found cottonwood trees and a good supply of spring water.

Upon their arrival in the Spanish settlements on the coast Smith was told that the black pebbles were solid gold which in some unknown manner had been coated over by nature with a thin film of manganese. After they had marketed their first load of furs they returned to the desert and brought out the balance and with the proceeds of the combined sales they proceeded to go on a spree that lasted several weeks. After they had been ordered out of the settlement by the Spanish officials they rounded up a herd of horses and mules and headed for the Bear River country to the north.

In 1848, just before the stampede of the Argonauts, Pegleg was back again in the desert searching for the three black buttes where years before he had picked up the black nuggets. Finally he gave up the search and returned to San Francisco where he died in 1866.

During the 85 years which have intervened since the death of Pegleg Smith the story of his fabulous discovery—with many variations—has become a legend of the desert country. It became impossible to attribute to one man all the experiences told about Pegleg Smith, so a second Pegleg Smith has been conceived. Many of the old prospectors who have spent years looking for the black nuggets firmly believe there were two Peglegs—and that both of them actually found the lost butte of the gold nuggets.

There is still another legend bearing on the Pegleg discovery. The story is that in the middle of the last century a white man was guided to the gold by Indians, and he reported the three buttes were part of the rim of a great volcanic crater, and that he was almost overcome with gas fumes welling up from its floor. However, he and his Indian companion were able to bring out about 50 pounds of the black-coated metal, and eventually received \$65,000 for their treasure.

My own connection with this strange adventure dates back about 25 years to the little town of Parker, Arizona, on the Colorado river. Some of the older inhabitants of the place had been telling me about a large meteor that had streaked through the night sky only a few years before, and that the vacuum or suction created by it was so great that it had picked up empty oil barrels on the platform at the depot in the little town of Vidal,

California, just across the river, and pulled them down the track for several thousand feet.

A great explosion was heard a few seconds later and it was believed to have struck a mountain a few miles south of Parker.

I was in the vicinity examining guano deposits at the time and decided to look for the meteorite. Later at Niland, California, I was informed by Mexicans that the meteorite had fallen northwest of that place and about 15 miles south of Corn Springs. I returned to Blythe, California, and purchased a mule from a contractor who had the contract to grade the approaches to the Colorado River bridge. After purchasing a saddle, saddle bags and some provisions it became noised around town that I was headed for the Corn Springs country and was told by some of the bootleggers that I had better stay away from Corn Springs as it was headquarters for a tough bootlegger who would shoot on sight.

Next day I headed down the road through Palo Verde Valley and made a dry camp the first night. The following morning I turned west along the old Bradshaw stage road and that night reached Chuckawalla well. I had just hobbled the mule and started supper on my little campfire when a young Mojave Indian and his wife came into camp. He was mounted on an Indian pony and the girl was walking by his side carrying a small sack of jerky and pinole. They seemed grateful for the opportunity to share my evening meal and rest by the campfire. Like most Indians they were uncommunicative and I did not press them for an answer as to where they were headed. Next morning after breakfast the woman filled the two-gallon canteen, hung it over the horn of the saddle and the man again mounted the horse and prepared to depart. I asked him why his wife did not ride and he replied, "Oh, she ain't got no horse." I watched them with some apprehension as they passed over the horizon and out of sight. It was the last time I ever saw them.

After prospecting for two days in the vicinity of the desert waterhole without finding any signs of the meteorite I decided to head west to the road that runs from Mecca to Blythe. I left the next morning after an early breakfast, rode hard until about 5:00 o'clock in the afternoon. My water supply had dwindled to about one-half gallon and the mule was showing signs of weariness. I had reached the eastern end of a long ridge or hogback.

Both the mule and myself were tired and thirsty and while the blackened rocks and scorched earth in the immediate vicinity did not offer much

hope, I felt some place on a large

Presently birds flying I knew that straight line in that direction and break their down toward ored rocks. closed a n or eight feet long. A do west end fo hard bedro There was other signs indicate the or white m

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A young Mojave Indian came into camp riding a horse, his wife following behind on foot.

hope, I felt that there must be water some place in the hills and sat down on a large rock to figure things out.

Presently I saw doves and other birds flying rapidly toward the south. I knew that birds flying rapidly in a straight line was a likely sign of water in that direction. I started to follow them and in a short time saw them break their flight in mid-air and drop down toward a break in the dark colored rocks. Further investigation disclosed a narrow crevice about seven or eight feet wide and 50 or 60 feet long. A dolorite dike cut across the west end forming a natural tank in the hard bedrock, full of clear water. There was no broken pottery or any other signs in the vicinity that would indicate the tank was known to Indian or white man.

Not caring to disturb the birds that had unknowingly led me to their water supply, I made camp a short distance away.

After an early breakfast next morn-

ing, I filled my canteen, watered the mule and headed up the long ridge toward the western horizon. About 5:00 o'clock that afternoon I reached the summit and then suddenly the top of a small black butte appeared and as I rode forward two smaller ones, one on each side, appeared. All were setting in a small valley or crater-like depression which was partly filled with white sand.

A brisk wind was blowing from the desert and a great yellow cloud came rolling up from the southeast. I knew that we were in for a sand storm and hurriedly led the mule down into the crater and tied him to the limb of a dead ironwood tree that stood near a wall of rock. Hardly had I tied him and removed the saddle and bags of provisions and stored them under a shelving rock before the storm was upon us with all its force.

Sheets of fine sand poured over the edge of the crater like water over a waterfall. The swirling winds swept

the bottom of the crater clean in places and piled the sand high in others. Not until about 4:00 o'clock in the morning did the wind cease to blow, and at daybreak I climbed out of the crater and cooked my breakfast.

Then, climbing the highest butte I found it literally covered with black pebbles, nuggets of brown hematite, and small boulders of white silica, all worn smooth. I picked up three of the stones and put them in my pocket. Later I gathered two small bags of them for I wanted to have them assayed.

I continued my search for the meteoric crater and at 3:00 o'clock the next afternoon found it. A 300-pound meteorite was partially buried in the gravel near the pit where the main mass had struck. I broke off a piece of it, and headed north through the Chuckawalla Mountains toward the old Gruendyke well which I knew lay somewhere northwest of Corn Springs.

The going was hard, and to spare the animal I finally cached the two bags of rocks from the crater, planning to return for them later.

Late in the day I reached the Blythe-Mecca road and came upon a small covered wagon where a tall grey-haired man was cooking his supper of beans. He invited me to have a plate of them, with dutch oven biscuits. He said his name was John Anderson and he was trapping coyote and fox.

Twenty years later I met John Anderson in the Hell Canyon country north of Prescott. He was very old, but he recalled our meeting in the Chuckawalla valley.

"Were you looking for the Lost Pegleg mine?" he asked.

I told him I had been out searching for a lost meteorite. This conversation recalled the three black stones I had picked up on that trip. Searching through my trunk later in the evening I found one of them. With a light tap of the hammer I broke off the black crust, and there was the loveliest gold nugget I have ever seen.

And now at the age of 68 years I am on my way back to the Colorado desert. If I do not succeed in finding the "Lost Valley Of The Phantom Buttes," I may at least find the \$12,000 or \$13,000 in black gold nuggets that I cached in the Chuckawalla Mountains.

As I recall the black gold deposit, it is another of those rare chimneys that have always produced so much gold. I saw one from which a fortune in gold nuggets was taken. The Black Gold Crater seems to be another chimney the top of which has been broken down by erosion, scattering the black gold nuggets, pieces of iron and small pebbles of white silica over the sides of the butte and around its base. Some chemical process in nature turned the nuggets black by coating them over with a film of manganese — Desert Varnish, the old-timers call it.

With modern transportation I believe that one could make hurried trips in and out of the desert and bring out a large amount of gold from this deposit. Provided however, that they can locate the lost valley.

Most of the prospectors who have been looking for the Lost Pegleg have been searching too far south and have been following the lines of least resistance. It is located in the higher and more difficult part of the mountains and can be found only by taking to the higher ridges and rough places and then only by accident as it cannot be seen until almost upon it. The buttes appear suddenly and cannot be seen from any direction until almost upon the edge of the crater.



Harry Oliver, Cyria Henderson and John Hilton inspect the bronzed statue of Pegleg Smith which was awarded by Ray Hetherington to the winner of the annual Liar's contest in Borrego Valley.

Annual Trek of the Liars...

Two prospectors found themselves in mid-summer in California's Chuckawalla mountains with two burros and no water. The water holes where they expected to fill their canteens were all dry and there was no moisture for the animals. The situation was desperate.

But just when it appeared that both men and animals would succumb to heat and thirst, a bank of storm clouds rolled over the mountains on the west. Rain started to fall—but when it hit the furnace-like atmosphere that hung over the Chuckawallas the pellets of water dried up and only the husks of the raindrops reached the famished men and animals.

The prospectors gathered ten bushels of them in their gold pans, crushed them between rocks and finally got two gallons of water out of the husks. And that saved their lives.

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That, in brief, was the tall tale that won Howard Clark, newspaper writer of Yucca Valley, California, the championship at the annual Pegleg Smith Liar's contest in Borrego Valley New Year's Eve.

Second prize winner was Joe Wright of the Hilton Gem and Art shop. Winner of the women's contest was Gertrude Ritchie.

Twenty-four contestants from all over the Southwest registered for participation in the event, and de-

spite a cold wind and blowing sand they followed one another on an improvised platform while a crowd of 200 hovered around a big mesquite wood fire and laughed.

First prize was a miniature bronzed statue offered by Ray Hetherington and Cyria Henderson. Mrs. Henderson spent several weeks modeling the figure in clay, and Ray, who was the originator of the Annual Pegleg Trek and Liar's Contest three years ago, arranged to have replicas made and bronzed as trophies. One of the trophies also was awarded to Arthur D. McLain, winner of the previous year's contest.

Prizes for second place and in the women's division were contributed by Russell Nicoll of Valerie Jean Date Shop, and Knott's Berry Farm.

A half dozen visiting newspaper men and writers who attended the campfire served as judges in the contest. The committee in charge, headed by Ray Hetherington, announced that the date of the annual event may be changed to April 1 in order to get away from the unfavorable weather which sometimes comes to the desert around the first of the year.

Despite freezing temperatures, many of the visitors slept in their bedrolls near the campfire that night and on the following day trekked over the Borrego country where Pegleg Smith's lost nugget-covered hills are said to be located.

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Members of the Evans family of Boulder City, Nevada, have created both a pleasant way of life and a profitable small industry by transplanting from the Missouri Ozarks to the Southwest desert an ancient craft. Here is the story of how they transform desert clay and natural pigments into colorful hand-turned pottery, utilizing a skill handed down for generations from father to son.

They Make Pottery of Desert Clay

By GENE SEGERBLOM

Photographs by Cliff Segerblom

WHEN I walked into the workshop of the Evans family in Boulder City, Nevada, Dorothy was busy at the potter's wheel, so engrossed in her work that it was several seconds before she glanced up.

She was engaged in one of the oldest of crafts, hand-turning pottery, but the Evans family has combined this ancient skill with today's flair for the unusual and colorful to build in Boulder City, Nevada, one of the most distinctive small industries in the desert Southwest. They create Desert Sands pottery. The actual craftsmen of the family are Arthur, his son Ferrell and his daughter, Dorothy Evans Thurston.

The Evans pottery industry began in the Ozark Mountains of Missouri four generations ago. Hugh Evans, Arthur's father, learned to turn the potter's wheel from his father-in-law, Tom Simmerman who had brought the trade with him when he trekked West from Georgia before the Civil war. He settled at Crowley's Ridge in the Ozarks in a log house by the side of the road.

Indians told him where to find the best clay in the hills and he soon had a thriving business, supplying his neighbors with the wares they needed for



Dorothy Evans Thurston turns out a vase on the potter's wheel.

household use. Eventually Hugh Evans taught his skill to his son, Arthur, and the latter, although still active, has trained his son and daughter to carry on his craftsmanship.

They came to Boulder City because the hundreds of thousands of visitors who come to Hoover dam every year seemed to offer a good market for their products.

To make their pottery the Evanses use ordinary desert clay, and color it with pigments of minerals mined in the Arizona and Nevada hills—reds from iron ore, grays from manganese, blues from cobalt.

To obtain clay for their colorful pottery the Evanses go to various old mining camps at Chloride, Searchlight, and to the Valley of Fire. The clay must be aerated for at least 30 days, longer if possible, and a chemical is added so it will hold the mineral colors.

After it is properly aged, the color pigments are added. Then lumps of the different colored clays are weighed to the desired sizes and squeezed or wedged together. The pottery comes from the wheel in beautiful blends of reds, blues, browns and creams, each with a different pattern.

The Evanses skillfully throw the multi-colored hunk of clay on a wheel which has been in the Evans family four generations. The wheel is the same type used by potters thousands of years ago, but with a power motor added—the only concession they make to modernity.

Although it looks simple, Arthur Evans says it requires some skill to keep the spinning wet clay in the center of the wheel where it must be, if the pot is to be symmetrical.

As the wheel revolves, the clay is coaxed into the desired form by what



Desert Sands pottery makes a colorful window display for the Evans' shop in Boulder City. Their workshop is the rear of the building.

is known as a series of drafts. The hands of the potter move with the speed and dexterity of a violin virtuoso, as the clay is shaped and smoothed. With a steel rib, the muddy water and finger prints are removed and a sponge soaks out all the surplus water.

Within four or five minutes the clay has a well-proportioned, symmetrical shape. The simplicity and beauty are the special gift of the potter who blends the clay as only a master craftsman can.

Then it is cut loose from the wheel with a thin wire. The pot is allowed to dry to a leather-hard stage and is returned to the wheel for a final smoothing-up.

The clay pots are dried and glazed for waterproofing and baked in the white heat (2000 degrees Fahrenheit) of the kiln for 10 to 12 hours. After

firing, they remain in the kiln, slowly cooling for another 15 hours. Sanding, stamping and buffing finish the product for marketing.

The demand for Desert Sands pottery is so great right in Boulder City that the Evans family finds it is not always possible to fill wholesale orders. However, they do wholesale to other shops in western National Parks when they are able to get ahead of the daily local demand.

In the four years since the Evanses started turning out handmade pottery in Boulder City, they have been able to move from a work shack into a modern building on the highway which goes through Boulder City to Hoover Dam.

"We like to have people drop in and watch us turn pots on the wheel," Father Evans said. "We welcome visitors any time we are open."

Helping in the marketing of the pottery is Alma Evans, Arthur's wife, who is usually on hand in their cheerful shop to explain the process as one of the pottery turning Evanses takes a turn at the wheel. Dorothy's husband, Raymond Thurston, also helps as does Ferrell's wife, Marie. It is really a family affair.

The Evanses are proud of the fact that their products are pottery, not painted clay. The patterns and tints come from the blending of the shades of clay on the potter's wheel. No two pieces are alike as to coloring, which makes them highly prized and sought as collectors' items.

It is something more than a commercial enterprise to the three clay throwing Evanses. "There is a great deal of satisfaction," Arthur says, "in making an object of art out of a hunk of desert clay."



One of the beautifully grained dark and light opalized wood specimens from the Wilson Canyon field.

Fossil Wood in Nevada . . .

By HAROLD O. WEIGHT
Photographs by the Author
Map by Norton Allen

TOWARD THE end of the last century in quiet, green Mason Valley at the base of the Singatse Mountains in Nevada, the "Messiah" lived. The "Messiah" was Wovoka — a full-blooded Paiute also known as Jack Wilson, since he had been brought up by David Wilson, a pioneer rancher of the valley.

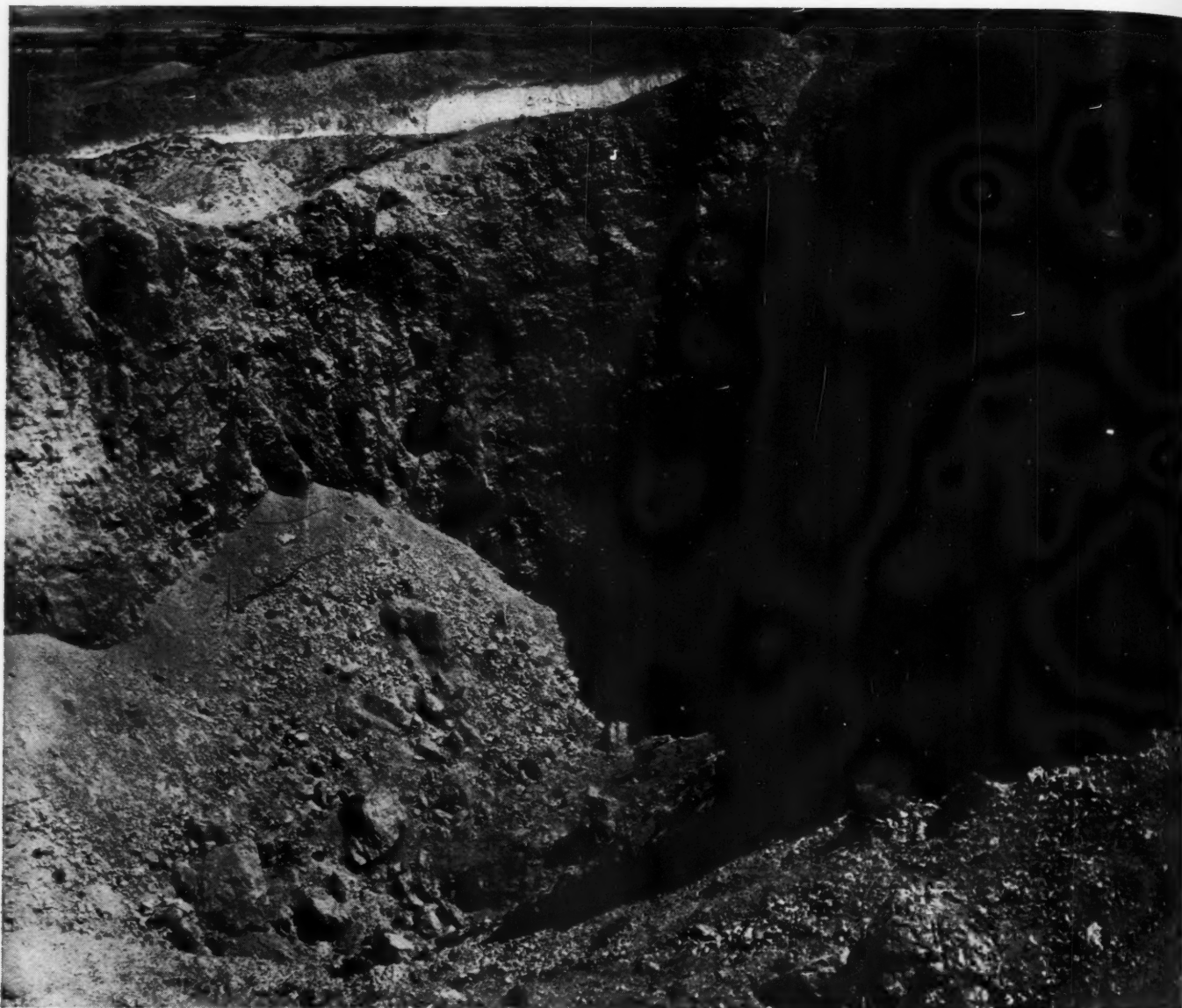
Wovoka was a peace-loving man. He preached a peaceful religion. But part of that religion was the Ghost Dance, which swept through the Indian tribes,

In their quest for new fields for the rock collectors, Harold and Lucile Weight went to Yerington, Nevada, where the mayor of the town guided them into a rugged area along the Walker River where many great logs of petrified wood may still be found bulging out of the slopes.

and the creed he taught became distorted as it traveled from mouth to mouth among the Indians east of the Rocky Mountains. His religion is said

to have been the spark which fired the Sioux outbreak of 1890, bringing about the massacre of Wounded Knee and the killing of Sitting Bull.

Reportedly, Wovoka was the son of an earlier Paiute prophet of Mason Valley, who died when the boy was 14. Brought up by the Wilsons, he apparently mixed their Christian religious beliefs with his own. His life followed normal lines until he reached his early thirties. Then one day, according to the story he told to James Mooney of the Bureau of Ethnology, the sun died—apparently an eclipse—and Wovoka fell asleep in the daytime and was taken up into the other world. It was a pleasant place where



Looking down into the chasm of the Bluestone glory hole. Holes on the far side are full-sized tunnels. Mason Valley in background.

all the people who had died were happy in their old-time sports and occupations.

The Great Spirit told Wovoka that he must go back and tell his people they must be good and love one another, have no quarreling and live in peace with the whites. If they worked, and did not lie or steal or fight, in time they would be reunited with their friends in the other world. The Ghost Dance, given him to take back to his people, would secure their happiness and hasten the day of reunion.

The first Ghost Dance was held near the Walker Lake reservation in 1889, and in a short time 60,000 Indians were affected, the doctrine having spread to the Sioux, Kiowa, Cheyenne, Arapaho, Caddo, Washoe, Diggers around Mono, California Mission Indians, Pitt River Indians, Hualpai, Chemehuevi, Mojave, Shoshone, Goshute, Ute and Havasupai.

Wilson Canyon, southwest of Yerington, which the West Walker River has cut through the Singatse Mountains, was named for the family that raised Wovoka. Rock collectors had told us about the dark petrified wood found there—but not one of them mentioned the scenic beauty of the canyon itself. So Lucile and I were pleasantly surprised when we visited it last summer. Rockhounds are often that way. They can spot a choice bit of cutting material three canyons away, yet leave with only a vague impression of the landscape through which they hunted.

Wilson Canyon would be worth visiting if there were not a collecting rock in the area. Since it does have petrified wood—and fishing if you are interested—it becomes a prime attraction. Where else on the desert can you hunt rocks in the dust of barren ashy volcanic hills until your tongue

is hanging out—then relax and sort your loot in prepared campsites under giant cottonwoods beside a rushing mountain stream?

Hallie and Alfred Jones, who operate Jones' Farmhouse—a restaurant and rockhound information center at the junction of Highways 50 and 95, west of Fallon—were responsible for our first visit to the canyon. They had promised us good rockhunting the next time we visited them. And when Lucile, Eva Wilson and I descended upon them late in July, Hallie already had contacted Arthur R. Gentry, prospector and mining man of Yerington. He had volunteered to guide us to the petrified wood field.

We were to meet Gentry at Yerington. It was a fast easy trip down paved highway 50, past beautiful Lahontan reservoir. About 18 miles from the junction, we turned south from 50 onto Highway 95 Alternate, passing

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through Wabuska and down green, irrigated Mason Valley.

When we reached Yerington, we found that Arthur Gentry's son-in-law, Bruce Barnum, mayor of the town, had arranged to leave business and official duties to help guide us to the rock field. Yerington, trading center of Mason Valley, is the seat of Lyon county. Mason Valley's first inhabitants settled there in 1860, when the rush to the silver discoveries at Aurora was on, taking up ranches which they watered from the east and west branches of the Walker River.

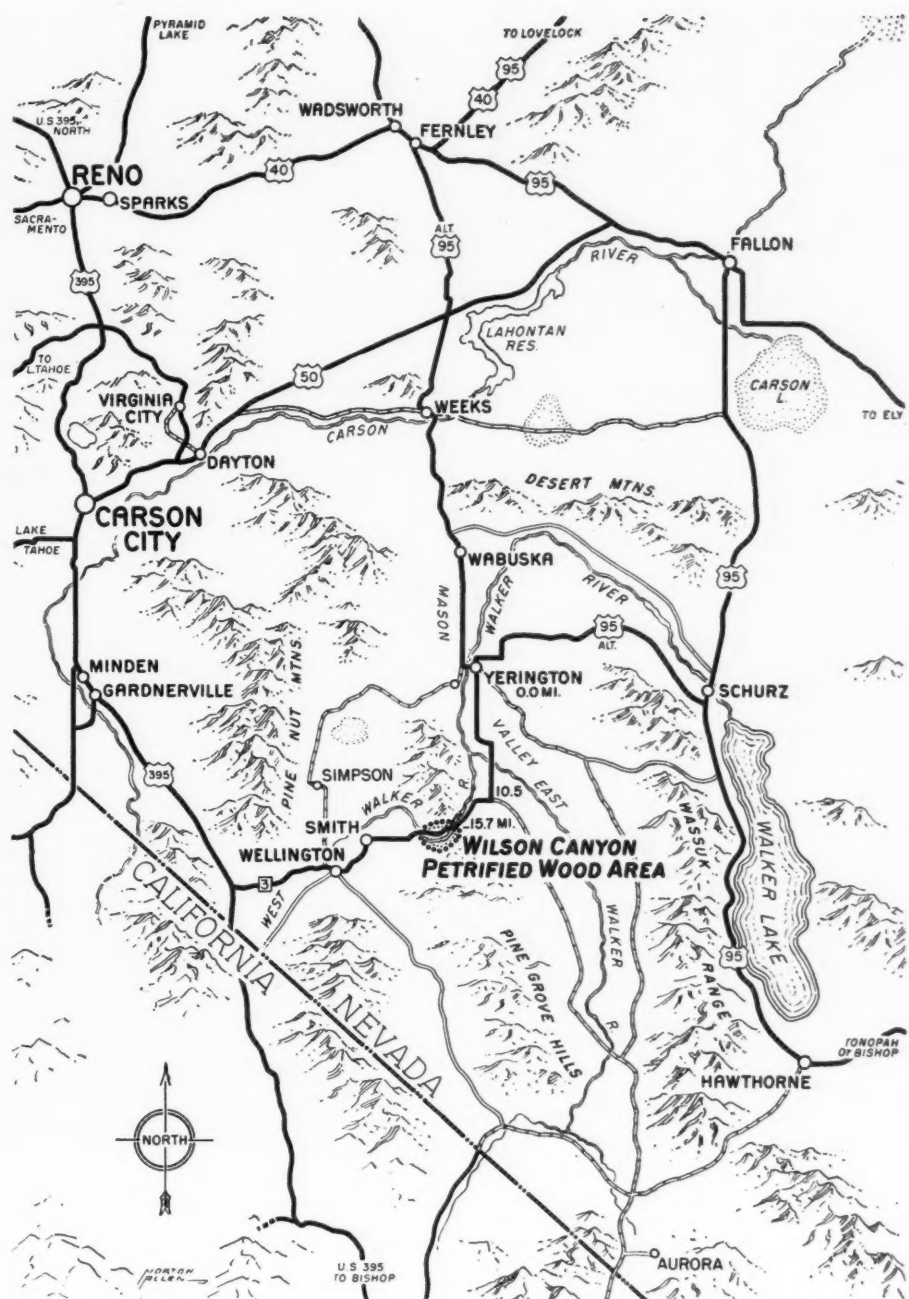
In its infant days, Yerington bore the amazing name of Pizen Switch. There are many stories as to the origin of the name, and Mayor Barnum told us one. During the silver rush, one fellow didn't wait for buildings before going into business here. He simply opened a whiskey barrel at the edge of the sagebrush. As the level in the barrel fell and he had no way of replenishing it, he poured in odds and ends of whatever was available—even plug tobacco, some said. Then he stirred the mixture with a sagebrush switch.

It was such vile stuff that the imbibers called it "pizen" and the title Pizen Switch gradually became attached to the place. When enough solid citizens settled near, they changed the name to Greenfield. Then, about 1869, the Virginia and Truckee railroad was built to connect Carson City and Virginia City. The Mason Valley inhabitants wanted the railroad extended to tap their country. H. M. Yerington was an official of the road. They named the town Yerington. The name stuck, but the railroad was not extended.

Yerington is proud of the attractions it has for mineral collectors. Mayor Bruce was determined to show us as many of them as possible. Before we started for Wilson Canyon, he drove us to the Singatse Mountains, west of town, to visit the dumps of copper mines for which Yerington once was famous and especially to see the big glory hole of the Bluestone.

Copper first was discovered in these mountains at the Ludwig mine in 1865. In some of the claims chalcantite—or bluestone—was found in quantities that could be mined profitably. This ore formed the principal output of the area in the early days, being shipped to Virginia City to furnish the copper sulphate used in amalgamating rich silver ores of the Comstock lode.

After 1907 important companies became interested in the big lower grade ore bodies below the enriched oxidized zone. The Southern Pacific railroad was at Wabuska then, and



from it the Nevada Copper Belt railroad was built to the Ludwig mine, being completed in 1911. Records indicate that prior to 1905 about a million pounds of copper was produced in the district. More accurate figures of the U. S. Geological Survey from 1905 to 1917 show a production of 61,193,800 pounds of copper, largely from the Bluestone, Mason Valley and Douglas-Nevada mines. With exhaustion of better ores, low copper prices and increased mining costs, the big mines closed down. Recent diamond drillings reportedly have shown large reserves, and big scale operations are said to be under consideration now.

Once the road to the Bluestone was good. But through the years the fine sand of the mill tailings has formed

many large sand dunes, and a great deal of it has blown across the road. When the wheels began to chatter and spin, we left the car and hiked around the curve to the first waste dumps. In them were many bright-colored bits of copper ore. Bruce advised us to keep climbing, saying that there was better material ahead.

Passing big pits where the ore had been gouged out, he led us through a 40-foot tunnel which opened onto a still larger pit. We scrambled up a goat trail and stood, uncertainly balanced in the wind, on a narrow ridge at the edge of the huge glory hole, so big that full-sized tunnels on the far side looked like mice holes.

We returned to the car, stopping briefly to collect specimens of malachite, azurite, bornite, chalcantite



Collectors on the trail to the petrified wood area, in a tributary of Wilson Canyon. Formation above, right, resembling an Assyrian Mary's little lamb, is a marker for the canyon.

and other coppers. The pieces we found were small, but they make attractive cabinet specimens and are most colorful in dish arrangements. Bruce assured us there were many other dumps where even better material was available. Most of these dumps are owned by the mining companies, but permission to collect on them has been obtained easily by legitimate collectors. Those wanting to hunt copper at Yerington should contact Bruce Barnum or Arthur Gentry for directions.

Back in Yerington, Mr. and Mrs. Gentry joined the expedition and we set out for Wilson Canyon, with the speedometer zeroed in the center of town. We headed south on Nevada Highway 3.

Wilson Canyon, where we entered it, is a narrow gorge in the mountains, in spots scarcely wide enough for the West Walker River, a beautiful stream overhung with the branches of many trees, which whirls swiftly down toward Mason Valley. The red and yellow and variegated canyon walls rose high and sheer on either side. In places blasting has been done to make room for the paving beside the river. For this reason, it is said, when engineers planned this highway which goes through to Wellington and on into California, they planned a detour around Wilson Canyon. But one county commissioner insisted that the canyon was too beautiful to remain

inaccessible to visitors, and so the road was worked through.

At 15.6 miles from Yerington, the highway crossed the West Walker on a concrete bridge. On the other bank of the stream is a small campground beside the river at the foot of a towering cliff. In a cleared spot under a spreading cottonwood was a rustic table, stone fireplace and other facilities. These, Bruce Barnum explained, had been constructed by service club members of Yerington.

Almost immediately after crossing the bridge, we left the pavement, following clearly marked tracks up a little draw and stopping not far from the pavement. Here we were facing a high pale hill to the east.

ROAD LOG Wilson Canyon Wood

- 00.0 Yerington. Head south on Nevada State Hwy. 3
- 10.5 Road Y. Keep right (West), and shortly enter mouth of Wilson Canyon.
- 15.6 Highway crosses West Walker river on concrete bridge. Cross bridge, then turn left, into little valley at
- 15.7 Follow rockhound tracks few hundred yards to end of track. From this point, climb over sandy hills to the east, on foot, on narrow trail. Go down and across next valley. Wood will be found in washes and on slopes on eastern side of this valley, and reportedly continues eight miles north and east.

"The petrified wood is beyond that hill and across the next canyon," Arthur Gentry explained. "A lot has been carried away, but I've prospected back in there for at least eight miles, and you can find logs scattered along the whole distance."

The hill seemed to be composed of an ashy volcanic material, and the going was rough until we came onto the faint trail other collectors had made. It was steep, but the footing was firm. When we reached a divide, we found the real pitch-off was on the eastern side. Bruce pointed across the flat-bottomed wash to odd eroded spires and pinnacles farther east. Those marked the boundary of the wood field, he said.

The only problem in reaching the bottom of the wash lay in avoiding a head-first plunge. On the other side a fairly well marked trail led up a little canyon tributary into a narrow gorge the mouth of which was marked by a strange bit of erosion that reminded us of Mary's little lamb. As we rounded the corner, we began to see some of the wood in place. The first sighted, to the right, was black and in places apparently carbonized rather than silicified. Soon we were locating numerous chips and chunks in the little dry stream bed.

A great deal of the material in this Wilson Canyon field is suitable only for specimens. But some is agatized and some opalized — largely light

brown and white or dark brown and white — and it is beautiful material either for cabinets or cutting.

There was one big log that Bruce wanted me to see. So while the others continued up the narrow gorge, he and I scrambled up its steep left slope. We soon reached a perfect cascade of petrified wood chips and followed them to the huge log he was hunting, a log nearly five feet through, which could be traced on the surface for about 25 feet.

Leaving the big trunk, we explored little side washes, everywhere coming upon chunks and bits of petrified wood of various grades of replacement. In some places the ground was littered with them, where a log had gone to pieces. In a short time, we were loaded with all that we could conveniently carry, and so slid down the slope to rejoin the others.

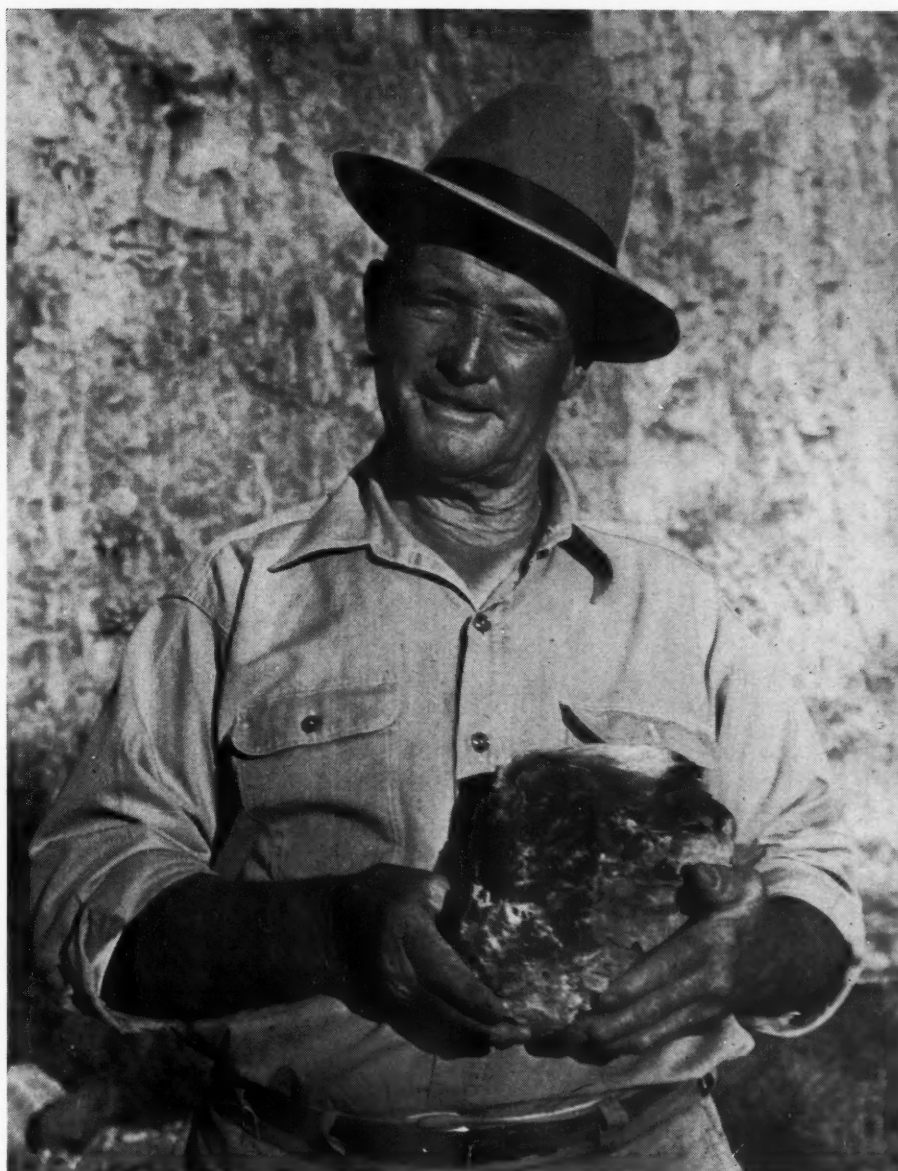
In the bottom of the canyon we came upon Lucile, lugging a splendid piece of dark brown and white opalized wood. It was the smallest of three that she had discovered, she complained, but the others were too big to haul. Then we saw Arthur Gentry gesticulating from a long ridge. He was already loaded down with a sack of silicified limb sections, but had located more wood on this point.

That was enough collecting for us. We had made all our finds in less than an hour. Looking at the hill over which we must climb before reaching the cars—a hill which was looking steeper and taller every minute—we decided to sort our specimens again. But there proved to be few with which we were willing to part.

Reaching the divide was a long, slow process, complicated by much back-sliding. Since these hardy Nevadans had told us the wood was "just over the hill," we had carried no water. By the time we were on the downgrade, we were thoroughly dehydrated. That hill grade probably explains why so much petrified wood is still available.

In the pauses for rest while we were climbing, Bruce Barnum told us how he happened to be mayor of Yerington. In the war he started as a Sea Bee and ended up with the Marines who stormed ashore on Iwo Jima. Most of the men in his group were dead before the rest were relieved. Returning to civilian work with one of the big oil companies, he was sent to Yerington. After a few years there, he was told, he would be able to transfer to one of the big cities.

At first Bruce and his wife Lillian waited eagerly for that transfer. In the meantime, Yerington was a nice



Arthur R. Gentry, miner and prospector of Yerington, leader of the field trip to Wilson Canyon, with a chunk of the opalized wood found.

place to be in, friendly and peaceful. Then the transfer became less important, and when the opportunity did come, Bruce declined, with thanks.

At the cars we packed our petrified wood, then spent a little while at the camp by the river. The restful coolness there, the musical purl of the water, seemed even more wonderful after our dusty workout. As we drove back down the canyon, its beauty was still more striking with the longer shadows and the sharper light of the descending sun.

I found myself wondering how often Wovoka, the Paiute "Messiah," had come to hunt or fish in Wilson Canyon, beside the sparkling river. Quite frequently, I should imagine, for the religion of peace and love—which apparently was his true message—often is born or strengthened in the quiet and beauty of wilderness places.

LIFE IS HARD FOR SALTON SEA HUNTERS

Hunters also have their problems. Hundreds of them camp around the shores of Salton Sea during the hunting season—hoping the wind will start blowing. The wily ducks and geese which flock to the Sea in winter sit on the open water out of range—and remain there until the surface of the lake is churned by strong winds. When that happens the hunters may get a shot.

But when the winter winds blow on the desert they generally blow cold—and often carry a heavy quota of sand with them. And that makes the waiting hunter very uncomfortable, especially in the early morning hours when the birds are most likely to be on the wing.

It requires a hardy sportsman to hunt on Salton Sea.



Kate Cory, beloved artist of Arizona. Photo by Charles Troncy.

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Seven Years With the Hopis

Last September when Miss Kate Cory was made an honorary member of the Yavapai Archeological Society, her membership certificate bore this inscription:

"Miss Cory, beloved citizen of Prescott, came from the East to discover the West and remained for seven years with the Hopis. Her paintings, well known in Arizona, exhibited in New York and Canada, have portrayed the customs and rituals of the Hopis; her writings have thrown light upon their everyday life; and her collection of Hopi artifacts and relics has genuine archeological interest."

By HAROLD BUTCHER

7HE WESTBOUND train stopped at Cañon Diablo, Arizona, and a woman passenger came down out of the vestibule. Between her and the far horizon was only empty space. "Why, there's no town here!" she

exclaimed to the porter who was helping with her baggage.

"I know, ma'am, but this is all they is at Cañon Diablo." While she looked about in dismay, George hustled his little stool and himself on board and the train, gathering speed, disappeared in the distance.

That was in 1905 when Kate Cory, now a distinguished Arizona artist living amid the pine-clad mountains at Prescott, came from the East to visit the Hopi Indians. Cañon Diablo was the nearest railroad stop to the Hopi Mesas.

There was a little trading post at

"This Was the Way" painted by Miss Cory while making her home with the Hopi Indians.





Oraibi, where Kate Cory made her home for seven years. Photo by Harry James.

Cañon Diablo, and there she was given a friendly welcome to this land of sage and space. From that time on, life was a never-ending adventure to Artist Kate.

She went to live at Oraibi, oldest of the Hopi villages, perched on a rocky mesa top, where the Hopis had been in occupation since about 1150 A.D. She found two rooms on the top floor of an Indian pueblo. It reminded her of a New York apartment in miniature. She had to pay very little for the privilege, and she was promptly serenaded by two girls, whose sweet primitive songs made her welcome. She had bought a return ticket to New York, but the little girls, the friendly Hopis—Hopi means gentle—made her love this place, and she never did use the ticket. She remained happily in her rented home in Oraibi.

With her paints and brushes around her, and the few necessities she had brought from the East, Kate Cory led a simple life and became so well acquainted with the Hopis that eventually she was invited to become a member of the tribe; an honor which she declined. She picked up enough of their language to make herself understood. Children brought her presents of corn and she gave them clothing from time to time. Her Hopi landlady liked to drop in occasionally to use the fireplace for cooking—evidently more accustomed to communal living than private possession—but she never took anything that did not belong to her, and after awhile Miss Cory accepted this invasion of her privacy as just another of the little ways that were different.

In the years—seven altogether, with time off for two trips to California and one back East—that Miss Cory lived

with the Hopis she learned their customs, which she recorded in photographs and paintings. One ritual that thrilled her was the great Feather Ceremony, a symbolic rite that takes place at dawn in greeting to the sun.

In the kiva—the sacred underground ceremonial chamber—the feathers from turkeys reared especially for this purpose are strung, each with a few inches of homespun cord. Then the Indians assemble in an open court—men, women and children, and mothers with babies on their backs—and hold their ceremonial dance with feathers fluttering and a generous sprinkling of corn meal as the sun comes over the horizon. Miss Cory was so moved by this ritual that she painted the scene on canvas.

The Bean Ceremony is another impressive ritual. At the proper season hundreds of beans are planted in the kivas, kept warm and moist, each man having his own thickly planted receptacle. The greenish white sprouts, grown to the length of one's forearm, are carried outside the village for a blessing ceremony. These and some corn sprouts are held on a tray before a green-masked figure, with big black wings, while quietly, one by one, little children come out from their doorways, reach up with awe, take one or two sprouts and return to their homes. The sprouts are treasured by their parents as a prophecy of the earth's new life and coming yield. Later in the day, maidens carrying armfuls of sprouts march in a remarkable procession, a final appeal to the unseen powers for fruitfulness of the fields.

Living in the Oraibi pueblo with the Hopis gave Miss Cory a fine acquaintance with their daily life.

"The men would get up early and go, on foot or riding a burro, to their corn fields," she said. "They planted their corn where it had the best chance of water, often 10 or more miles away. They buried the seed deeper than is usual in less arid areas so as to give it a better chance of moisture. They had difficulty in protecting the growing corn, which was sometimes stolen by Navajos and Utes. The gentle Hopi people were unable to prevent this so they invited the Tewas of New Mexico to come and live with them and help protect their fields. The Hopis built the pueblo at Walpi for them and gave them land to grow their own crops. The Tewas had their own language and sometimes a Hopi woman could not at first understand the Tewa man to whom she was married. However, the children growing up in the family understood both languages, and then when the government taught English in the schools, they acquired a third language.

"Late in the afternoon," Miss Cory continued, "the wife brought supper to the top of the house, where the family ate a meal consisting of stewed beans and piki. Piki is finely ground corn made into a thin batter. This is spread on a heated stone to bake. The bread thus formed is quite palatable, although it may be somewhat gritty. After supper a blanket was spread on the floor of their home, and there the family slept."

Miss Cory learned about the rather complicated ritual of marriage. There was no such thing as love at first sight and then elopement. The girl was told by her parents whom she must marry, the selection being limited to certain clans. More recently the old customs are giving way to the white man's creed that young people are entitled to select their own mates.

When a girl was to marry a certain man she would grind a bowlful of corn meal and carry it, about sunrise, to her prospective mother-in-law. Having accepted the corn meal, the woman took the girl to her grinding stones. She had to grind for three days. It was the test of her ability as a housewife.

The unmarried girl's hair-do was "squash blossom" style, similar to the feminine style in Japan before that country went modern. When married the girl took her hair down, and never put it up again. One day Miss Cory persuaded a married woman to put up her hair so that she could paint her portrait.

The young woman arrived with a bundle under her shawl, and when Miss Cory had locked the door, she took out a hairbrush made like a bunch of fine broom straws tied in the middle

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Miss Cory's painting of the Hopi Feather Ceremony. Photo by Charles Troncy.

—fine ends for sweeping the floor, butt end for the hair—and the U-shaped stick on which the whorls of hair are wound; also her Hopi dress.

Hair-do arranged and picturesquely costumed, the Hopi maiden was ready for her portrait. Miss Cory did a good drawing and was all set for the application of color when some youngsters peered into the window, making the woman nervous. The artist shooed them off, but they returned and urgently beckoned the woman to go outside. When she came back she declared: "The womans say I must not have my picture made with my hair like unmarried girl, and they are very angry with me. They say if I do not take it down they will come in and do it themselves."

Fortunately the painting had gone far enough for completion later, so, without arguing, Miss Cory told the woman to let her hair down. The finished picture is one of the most attractive in the artist's possession.

The finest tribute that came to Kate

Cory in Hopiland was admission into the kivas, a privilege rarely granted to white people, and almost unthinkable in the case of a woman. Her knowledge has been placed at the disposal of the Smoki People of Prescott, white professional and business people, who interpret Indian lore in ceremonial dances every August and regularly stage the Hopi Snake Dance, with which she is intimately acquainted through witnessing it among the Hopis.

In her Prescott home, with its panorama of mountains seen through wide windows, Miss Cory has constant reminders in paintings, photographs and notes made when she lived in Hopiland from 1905 to 1912. One of her large paintings depicts a band of Indians traveling across the desert, guided, she believes, by pictographs incised in a rock by other travelers who had passed before. That picture she titled, "This Was the Way," and it has value in showing the signpost method employed by Indians in steering travel in otherwise directionless

wastes. Paintings such as this have served to enlarge the white man's knowledge of the First Americans. They are the outcome of happy years with a friendly people.

SHOULD GRASS REPLACE FORESTS OF MESQUITE?

Grass will not flourish on lands heavily wooded by mesquite trees—and this fact has given rise to a controversy among Arizona cattlemen. Some of the stockmen defend the mesquite trees on the ground that they furnish shade for cattle, and their beans provide nourishing food in dry years when there is little grass.

Other members of the cattle fraternity hold that the range is more valuable when the trees are removed and the land seeded to grass.

Experts are at work trying to determine the best combination of mesquite trees and grasses for range purposes.

It is estimated there are 7,000,000 acres of mesquite lands in southern Arizona, and 8,000,000 acres in southern New Mexico.



Above—Established as authentic, this Dellenbaugh inscription was carved in the sandstone wall of one of the caves along Cave Lakes Canyon.
Below—Cave Lakes Canyon in the colorful sandstone country of southern Utah. The town of Kanab gets its water supply from this Canyon.

Dellenbaugh, 1873

By WILLIAM H. BEHLE
Map by Norton Allen

IT WAS in March of 1946 that I first saw the inscription "F. S. Dellenbaugh, C. R. E., Jan. 25, 1873," on the sandstone wall of a cave in Cave Lakes Canyon, 7½ miles from Kanab in southern Utah.

I had gone there with four students from the University of Utah to make a survey of the bird life in that region. Through the courtesy of Beverly and Mark Hamblin we established camp on their ranch in Cave Lakes Canyon a half mile from its junction with Three Lakes. Mark Hamblin is a grandson of Jacob Hamblin, Mormon missionary who played a major role in the exploration of the Southwest from 1850 to 1886.

Cave Lakes Canyon is one of the most interesting places in the area. Unlike other canyons of the region it has considerable water, thus supporting vegetation quite unexpected in a dry and sandy region. One finds areas of grass, groves of cottonwoods, willow-patches along the stream, box elders and oaks in more shaded areas and even small cattail swamps in places. For the most part, the canyon walls are vertical with a 50 or 100-foot drop from the rim.

At the ranch and for about an eighth of a mile above it, several large, open dome-like caves have been formed back under the canyon rim. Some are now dry and, with fences across the front, make natural corrals for livestock. Others have pools of clear cool water in them, dammed up

Frederick Samuel Dellenbaugh at the age of 17 was the youngest member of Major John Wesley Powell's second expedition down the Colorado River in 1871-72. He served as artist and assistant topographer and in the latter capacity helped A. H. Thompson in preparing the first map of the Grand Canyon region. He afterward became the unofficial historian of the Powell expeditions through his two books, "The Romance of the Colorado River" (1902) and "A Canyon Voyage" (1908).

by the accumulation of sand at the wide entrances. Mosses appear along the damp ledges and aquatic plants grow in the water. The water supply for Kanab comes from these caves in Cave Lakes Canyon. Many archaeological finds have been made in the caves and round musket balls, probably shot by early Spaniards at Indians, have been uncovered.

The second day in camp I wandered over to one of the caves on the south side of the canyon and noticed that the walls at the entrance had many inscriptions and names carved in the soft sandstone. They were mostly of recent date although displaying various degrees of erosion and effacement and were evidently made mostly by the people of the region. The one by Dellenbaugh had been well preserved.

To establish the authenticity of this inscription it seemed necessary to prove that Dellenbaugh was actually in the Kanab region on the date given. Evidence that he was there is found in the diary of Almon Harris Thompson published by the Utah State Historical Society several years ago. Nothing additional bearing on the inscription is found in the recently published journals of the various members of the two Powell expeditions also appearing in the Utah Historical Quarterly.

Returning to Powell's second expedition, following the river trip which proceeded only as far as the mouth of Kanab Wash in the Grand Canyon, the interval between September 1, 1872, to June 4, 1873, was spent doing topographic work around Kanab, St. George, Pipe Spring and the Paria River. Of the 11 men departing from Green River, Wyoming, with Major Powell on May 22, 1871, on their second trip, seven were still in active service near the end of 1872. On November 30, 1872, Major Powell, W. C. Powell, John K. Hillers, Stephen V. Jones and Andrew J. Hatten left Kanab for Salt Lake City. Thompson and Dellenbaugh remained behind to complete the work on the first map of the Grand Canyon region. John

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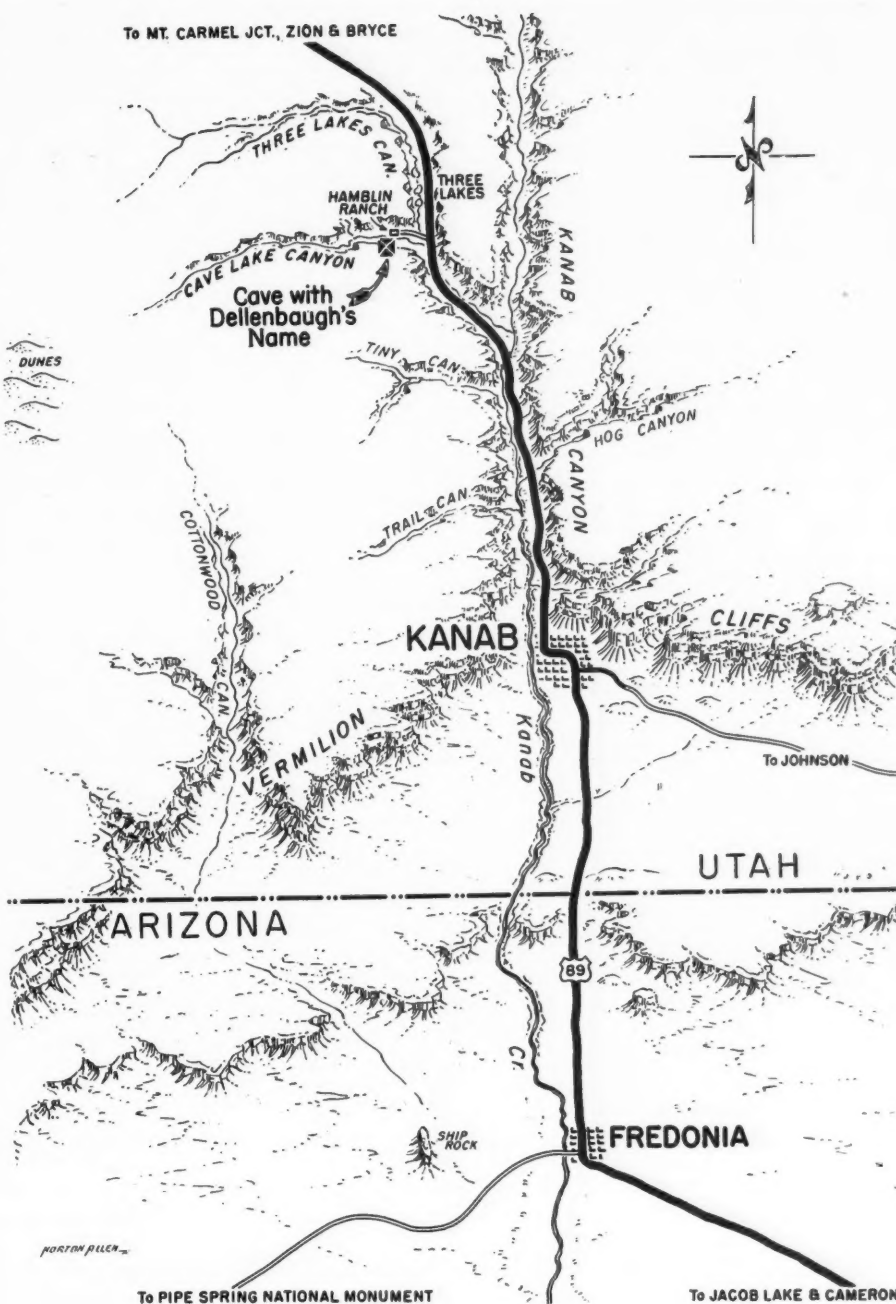
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or Jack Hillers subsequently returned to Kanab and continued his photographic work. In mid-February of 1873 the map was completed and was taken to Salt Lake City by Dellenbaugh.

Concerning their stay in Kanab, Thompson made the following entry in his diary (Utah Historical Quarterly, vol. 7, 1939:106): "Friday, November 29th. (The party) At work getting ready to move north. Decided that I would winter here, keep Fred, and with him and John, make the best map I could. Am to pay Fred \$400.00 when he is through." Dellenbaugh wrote: (see foot note page 107) "Prof. concluded to make winter headquarters in Kanab and a lot was rented for the purpose. On December 3rd, we put up a large tent in one corner, with two small ones for rations and saddles. The next day we put up one in the other corner for Prof. and Mrs. Thompson, and at the back of the lot we arranged a corral for the horses or mules we might want to catch. The large tents were floored with pine boards and along the sides heavy cedar boughs were placed in crotches around which the guy ropes were passed before staking. The tents thus were dry inside and could not blow down. A conical iron stove on a boxing of earth heated the large tent like a furnace. In the middle of the general tent we placed a long drafting-table and were ready for work. Another tent, half boards, was erected near ours for kitchen and dining-room, and Riley, who had turned up again, hired as cook and master of this structure. Prof. arranged for a supply of potatoes, butter, meats, and everything within reason, so we lived very well, with an occasional dash of Dixie wine to add zest."

Neither Thompson nor Dellenbaugh make specific mention in their journals of their activities on January 25, 1873, the date of the insignia, but there can be little doubt that this is a genuine Dellenbaugh inscription. The date on the rock was near the time of completion of the map and doubtless Thompson was thinking of his next project of extending the topographic survey to the surrounding plateau areas. He speaks of Jack starting for Mt. Trumbull on January 24th with an Indian. On Sunday, February 2nd, he comments "Plotted trail up Kanab Wash." It may be that Dellenbaugh was doing some exploratory work in this latter connection while awaiting the completion of the map so he could leave for Salt Lake City and this work took him up Cave Lakes Canyon. Or he may have had a day off and visited the area. Two other names are associated with Dellenbaugh's as may be



seen in the accompanying picture. Fred Haycock was doubtless a relative of Joseph Haycock who assisted Thompson in the activities of 1873 in mapping the country east to the Paria and westward to the Pine Valley Mountains. I have found no mention of Vin Farnsworth who was probably from Kanab. This latter name seems to have been carved in the rock later.

We learned that John D. Lee's name was supposed to be present in the cave but we did not find it. It may have weathered away. After first viewing Dellenbaugh's name, we saw it subsequently on other trips there on May 11, 1946, and December 30, 1946. Finally on June 19, 1947, we returned once again to photograph the inscription.

Bearing on the authenticity of the

inscription, Mrs. Hamblin recently wrote me as follows:

"Jesse L. Nusbaum, director of archaeological research for the U. S. Park Service in the Southwest, excavated for the Heye Foundation one of the caves on our property in 1920 and 1922. The site was of the Basket-Maker Culture and he later wrote a monograph titled *A Basket-Maker Cave in Kane County, Utah*.

"More recently Mr. Nusbaum visited our ranch and during his brief stay here he told me that knowing Mr. Dellenbaugh he often wondered if the inscription he observed here was authentic. Before Mr. Dellenbaugh's death he obtained from him a verification in writing that the inscription was genuine."

Hard Rock Shorty

OF
DEATH
VALLEY



The temperature under the lean-to porch of the Inferno store was 122 degrees, but out in the sun the mercury went to the top of its tube and stopped at 140 degrees because it could go no higher.

"No, tain't allus hot in Death Valley," Hard Rock Shorty was saying to the dude prospectors who had braved the summer heat to come into Death Valley to look for the Lost Breyfogle mine.

"Gits so cold up here some winters we hafta mix this anti-freeze stuff in our coffee so it won't turn to ice comin' from the stove to the dinin' table.

"We nearly lost Pisgah Bill durin' one o' them freezin' spells back in '14. Bill wuz minin' up on Eight Ball crick that winter. One night a flock o' geese come in and landed on that little reservoir Bill'd dammed up below the spring.

"Next mornin' when Bill went out to water the burros them geese wuz settin' on a pond o' ice. They couldn't fly away cause their feet wuz froze in the ice. Bill come rushin' back to the cabin. 'Lookin' fer a club,' he shouted. 'Gonna have goose fer dinner fer a month.'

"He picked up an ol' pick handle an' ran out on the ice among them geese. But before he could start swingin' they all started flappin' their wings, and next thing he knew them geese 'd taken off, carryin' that big cake o' ice with 'em. There was Bill right among 'em, gainin' altitude every minute. They got up to a thousand feet and headed south. Bill was cold and scared, but he couldn't do nothin' about it. He hung onto a big gander's neck and prayed them geese'd make a safe landing somewheres.

"They hadn't gone far before them birds spotted that big pond down at Tecopa Hot Springs and they headed for the water with steam coming from the top of it. They made a good landin'—but the ice started to melt so fast that if Bill hadn't been a darned good swimmer he'd a drowned."

THE *Desert* MAGAZINE CLOSE-UPS

Harold Butcher, who wrote the story of Kate Cory, the artist, for this issue of *Desert Magazine* is a resident of Prescott, Arizona, where he has been a free lance writer and radio commentator since 1944.

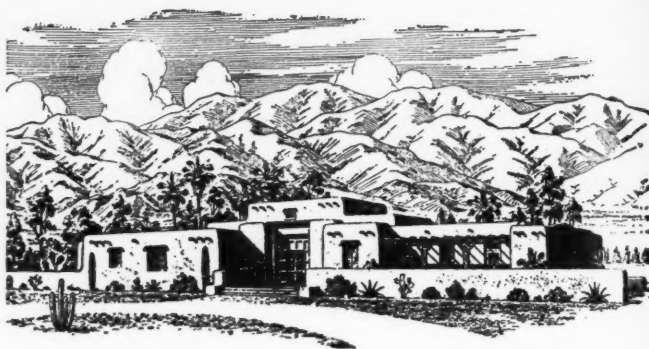
Harold spent 23 years of his life in New York City where for seven years he was U. S. correspondent for the London Daily Herald. But he came west for a few months in 1928-29, and New York was never the same after that. It took 15 years of planning, but eventually he realized his dream of a cottage in the Southwest, and selected the mile-high pine-clad oasis of Prescott as the new home for himself and his family.

He was president of the Yavapai Gem and Mineral

society in 1948-49, and was first president of the Yavapai County Archeological society, formed in 1949. He has a weekly program on KYCA of Prescott featuring the arts, sciences, and hobbies.

Scheduled for the March issue of *Desert Magazine* is the story of an attempted ascent of Picacho del Diablo, highest peak on the Baja California peninsula. Louise Werner, who wrote the story for *Desert*, was a member of the Sierra club expedition which undertook to make the ascent, but failed to reach the goal because of obstacles which could not be overcome in the time allowed for the climb. Accompanying the story will be Norton Allen's map of the western slope of the San Pedro Martir range, of which El Picacho is the high peak.

Friend or Stranger. You Are Welcome Here . . .



Many thousands of new subscribers were added to *Desert Magazine's* list during the Christmas season this year, and to these new companions along the desert trails the editorial staff extends a cordial welcome.

We want the new readers of *Desert* to know—that what our veteran readers already know—that they have a standing invitation to visit the publishing plant when they have the opportunity. The art gallery, the book shop and the printing plant all are open to your inspection—seven days a week during the winter season.

Above is an artist's sketch of our building, and below is a map showing the location, in the Coachella Valley of California.

Over the front door is the legend: "Friend or Stranger, You are Welcome Here"—and that welcome applies especially to those who read *Desert Magazine* every month.



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The VINEGAROOON (Trithyreus sp): Almost crab-like in appearance, this strange creature is harmless and can only pinch with its dangerous-looking claws. Its tiny eyes are on top of its head at the base of its pincers. Some are almost completely black, while others may be a dark reddish-brown.

Desert Ogres

By GEORGE M. BRADT
Photographs by the Author

IN THESE pages are pictured five more or less well-known denizens of the desert country—desert dwellers which do not rate very high either in beauty or popularity.

Before reading the story, look at the pictures and decide—on a basis of appearance—which of these little ogres of the desert country you would consider the most dangerous to meet at close quarters. Two of them have poison venom, three do not.

If I were to be the judge, on looks only, I would name the Vinegaroon as Public Enemy No. 1 of the quintet. Certainly it is a vicious looking little beastie. Then would come the Centipede, the Tarantula, the Black Widow spider and finally the Scorpion.

But looks are deceiving. Actually, the order in which I have named these little ogres is the reverse of their poison potential.

Most dangerous of the five is the Scorpion. Not all Scorpions are killers. Dr. Herbert Stahnke of Mesa, Arizona, who spent many years collecting and studying Scorpions, reported in 1941 that of the 21 species he had identified only two of them carried deadly venom. These two were small types of Scorpions found



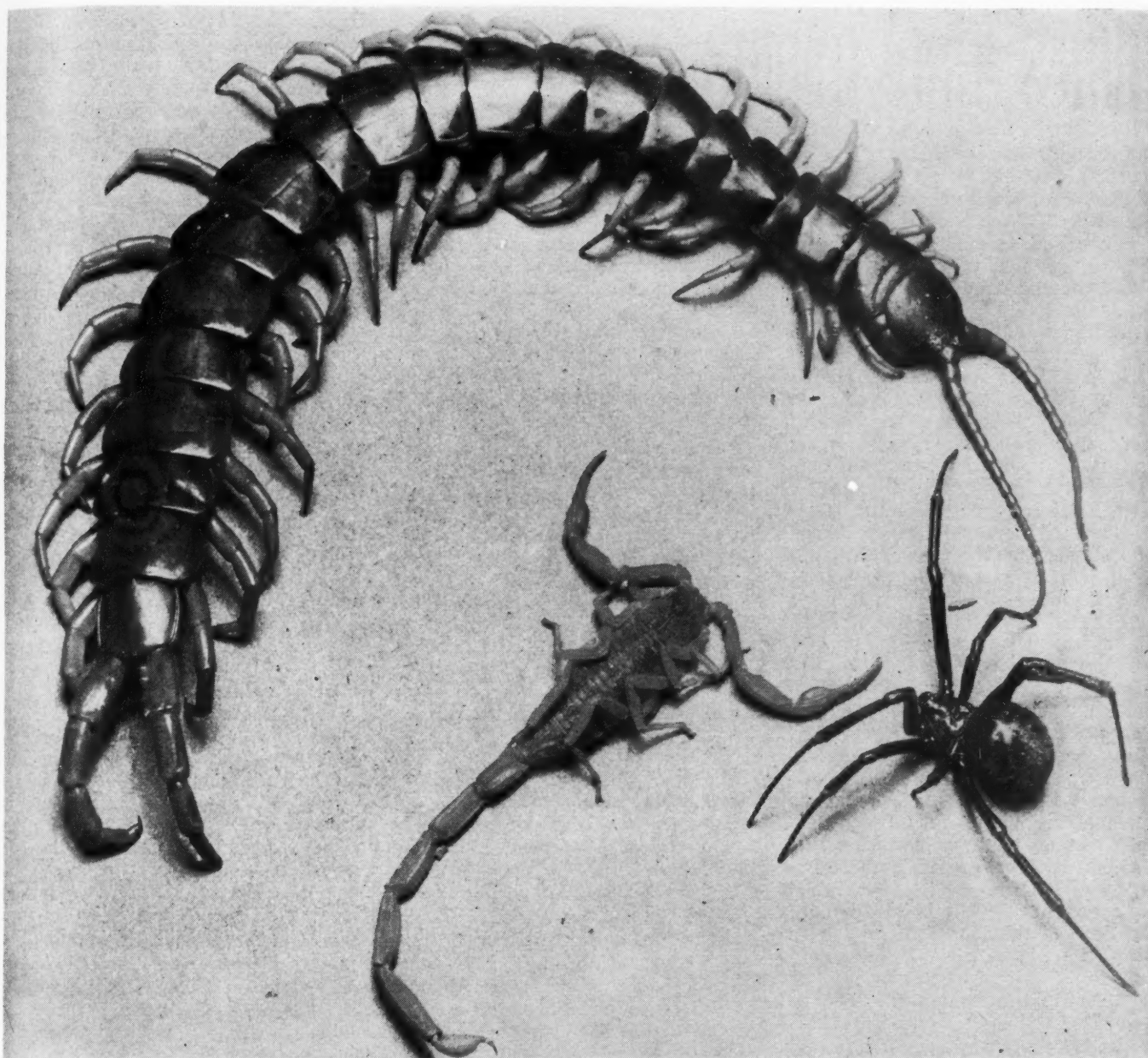
in southern Arizona. The poison of these two species is not always deadly. Most of the deaths reported are among children. Adults may become seriously ill, but generally they recover. Dr. Stahnke found that the immediate application of ice to the wound is the most effective first aid treatment.

Scorpions do not bite. They hold their prey with their sharp jaws and use their segmented tail with its curved, needle-sharp stinger to inject poison beneath the victim's skin. Scorpions prefer to hide in dark places during the day—wood piles, bedrolls, shoes and clothing.

Villain No. 2 is the Black Widow—the United States' only dangerous spider. It is about an inch long, glossy black, with a distinctive red spot on the under side of its abdomen. Black Widow is not aggressive and prefers to live undisturbed in a secluded corner of store-room or wood pile. It only bites when accidentally restrained. Although deaths have been reported for this dangerous spider, its bite, though followed by severe and painful symptoms, is usually not fatal. A doctor should be consulted immediately, however. Here again, watch your bare hands!

The Centipede really does look dangerous. When captured it

TARANTULA: *This large and common desert spider can often be encountered walking over the desert floor in search of food. When frightened it will dash for its hole, but if one's foot is placed over the opening in the ground quickly enough the spider may be picked up with a long pair of forceps. The one in the photograph is shown with its egg-sack which contains a hundred or so tiny cream-colored eggs.*



THREE PUBLIC ENEMIES: *Although the Centipede is not really dangerous, its bite is extremely painful. The other two—the Black Widow and the little straw-colored species of Scorpion, carry venom in their stingers—venom that has been known to cause death, although fatalities are rare.*

will thrash about, biting with its sharp jaws when held in a gloved hand. Actually, its bite (not sting) is more painful than dangerous. It is not true that its feet are poisoned. The sharp claws on its two score and more legs may puncture the skin but they contain no venom. Don't be afraid of the centipede—but don't let a large one bite you, either!

The Tarantula is undeservedly feared by many. It really is a gentle and inoffensive desert citizen. Its sharp fangs can inflict a painful bite, but no poisoning will result. Tarantulas should be protected because of their insect-eating habits. They can be forced from their web-lined tunnels by flooding with water. They make interesting pets, and can be kept alive on a diet of cockroaches.

Last on the list is the completely innocuous Vinegaroon. It doesn't sting, or bite, or even shoot vinegar into your eyes. Its great pincers are used to hold its prey. It receives its odd name from its habit of emitting a vinegar-like odor when molested. Its other name is whip scorpion. While its usual diet is insects I once discovered a large vinegaroon in my garage dining on a baby house mouse. It is really a beneficial fellow and should be protected. Maybe it isn't very pretty—but then beauty is only skin deep.

MINES AND MINING . . .

Bakersfield, California . . .

A 200-year-old "lost mine," which once was worked by Indians and furnished gold to the Spaniards, is again yielding gold ore, some of it worth \$240 a ton. The old mine is located 50 miles south of here in the Tehachapi Mountains, has been reopened by V. F. Baggett and is now being worked by Baggett and his wife.

Baggett is a former construction employe of the Fox movie studios in Hollywood. He dreamed for years of working his own mine, saved as much as he could and completed a three-year course in mineralogy before he started out to look for a mine. Hearing through a Bureau of Mines official of lost mines in the Frazier Park region, Baggett staked claims, bought 300 acres of land, took in machinery and started working the dump of the old abandoned Spanish mine.

After three months he unearthed the mine portal. Following the worked-out gold vein deep into the tunnel, Baggett discovered that it grew richer. He is digging a new tunnel and bringing out dirt assaying \$240 a ton. Although he declines to disclose the value of his recoveries to date, Baggett admits that he considers the \$83,000 he has invested in the property well spent.

Legend has it that in the days of the Spanish missions Indians carried the gold ore in baskets over the mountains to the coast, where it was shipped to Spain. When white men tried to follow the Indians to learn the source of the gold, the tribesmen disappeared in the mountainous country. Finally the Indians tired of working for the Spaniards and abandoned the mine. It had been one of the lost mines of the Southwest ever since.—*Humboldt Star*.

Washington, D. C. . . .

In a move to spur development of uranium resources on the Navajo Indian reservation, the Indian bureau has ruled that members of the tribe may reassign their mining permits. The new rule applies only to existing permits held by individual Navajos. Its purpose is to make possible development of uranium deposits on the reservation in Arizona and New Mexico by experienced mining companies. The new policy does not yet apply to mining permits that may be issued to Indians in the future. This may not be the best way to exploit the resources for the best interests of the whole tribe, the bureau says.—*Gallup Independent*.

Coachella, California . . .

Changes in mining laws making regulations still more strict and requiring more red tape and book work for prospectors and small miners, have been proposed by the U. S. Bureau of Land Management and the Department of Interior has indicated it will submit them next year to congress. Some western legislators and mining leaders believe the prospector and small miner would be doomed under the proposed laws.

Proposed changes would: increase the value of annual assessment work from \$100 to \$300; require advertising applications for patents; require filing an annual statement of assessment work performed; make patent holders and prospectors liable for damages; change mineral patent procedure so as to reserve to the federal government the surface and surface resources; make much more complicated the filing of locations; revise the manner of locating claims on unsurveyed land.—*Desert Barnacle*.

Twentynine Palms, California . . .

Land recently deleted from Joshua Tree National Monument, a net of 289,500 acres, is now open for mineral entry and leasing, according to Paul B. Witmer, Los Angeles district manager for the Bureau of Land Management. New monument boundaries have been set. Land now available for entry was deleted from the eastern portion of the desert preserve.—*Desert Trail*.

Artesia, New Mexico . . .

Despite the general belief that there are no profitable ore deposits in this area, a reportedly rich deposit of gold, silver, copper and lead has been uncovered on Twelve Mile Hill east of Artesia. Charles Eaker is credited with making the discovery. Ten claims have already been staked at the old turquoise diggings on state land within sight of Highway 83. Prospecting has turned up free gold and silver and copper and lead in ore form—in addition to quantities of turquoise. The deposit is about 10 feet under the surface in the form of a thrust. Eaker and associates have been quietly working on the thrust more than six months. It is estimated the ore and free metal, not including the gold and turquoise, is worth \$19.50 a ton.—*Penasco Valley News*.

Grants, New Mexico . . .

Although published reports of the uranium discovery near Grants have been greatly exaggerated, according to Thomas Evans, chief geologist for the Santa Fe railroad, the company plans to continue extensive exploration and sampling operations and tentatively proposes to build an experimental crushing mill and laboratory at Baca, 20 miles west of Grants.

The Tyuyamunite ore containing the uranium is found in limestone along the surface. There is no continuous vein of the ore, Evans says. It is found in spotty locations. Reports of an 80-mile-long ore belt "were assumptions by outsiders" after they heard Evans say the limestone formation "extends west from Grants to Gallup." He said the company has tested only six or seven miles of the field.

Prospector Alfred Hutton filed an early claim on a 640-acre tract in the heart of the uranium-bearing district, is now involved in a dispute with the railroad over the rights to the ore.—*Gallup Independent*.

Vernal, Utah . . .

A natural gas deposit capable of producing more than four million cubic feet per day has been discovered by the California Oil company in its Red Wash drilling, but since there is no way to pipe gas out of the area the company will drill on through the gas formation in its search for oil. The Red Wash structure is located about 23 air miles from Vernal. Gas was discovered between 4261 and 4294 feet.—*Vernal Express*.

Winnemucca, Nevada . . .

Getchell Mines, Inc., a gold producing property since 1936, will shift its operation to defense activities and go into the production of tungsten as a result of the present war mobilization. Properties owned by the Getchell mine in the Potosi district include four tungsten deposits. There has been no order from the federal government to close gold mines, as was the case during World War II, but it is claimed that shortages of material and labor will automatically force the closing of most gold mines.

Tungsten is a strategic mineral, is more scarce than ever now with the Chinese, Indian and Korean sources cut off. It is believed these sources are supplying Russia and Communist China with the vital metal. Activation of tungsten mining may greatly increase the business pace in Nevada, as there are many showings throughout the state. Getchell may provide custom milling for the small deposits.—*Humboldt Star*.

Reno, Nevada . . .

Basic forms on which applications for strategic and critical mineral development loans may be made under the Defense Production Act are now available at the Department of Commerce field office, 118 West Second street, Reno, and regulations governing the loans have been formulated, according to Senator Pat McCarran.

A new Defense Minerals Administration has been set up to receive and process loan applications. Administrator is James Boyd. Aim of the new agency is to increase supplies of minerals vital to national defense. Applicants for loans must furnish a great deal of additional information beyond that included on the application forms. This information must be detailed, covers a description of the mineral showing, size and history of the deposit, its location, and financial requirements of the project. Full information may be obtained from the Reno office of the Department of Commerce. —*Reese River Reveille*.

Henderson, Nevada . . .

Discovery of a new use for lignite, a form of low grade coal, has brought hope to owners of lignite claims in Nevada. Experiments with lignite by the Bureau of Mines, working with the University of North Dakota, have developed a process for making gas from lignite, a gas that scientists say "may well produce a revolution in the fuel industry." The new gas, it is claimed, has many uses other than as an industrial fuel. It can be made into gasoline, alcohol, ammonia, waxes, dyes and even into fats for human consumption. Already cost of producing the gas is low enough to compete with coal shipped for long distances. —*Las Vegas Review-Journal*.

Tonopah, Nevada . . .

A 400-foot tunnel is being driven at the Booth gold property in the old Cimarron district, 30 miles north of Tonopah, in the hopes of locating downward extensions of veins exposed in upper workings. The mine has been acquired by Chicago interests who have installed a Diesel engine, compressor, mechanical mucker and other machinery. —*Los Angeles Times*.

Salt Lake City, Utah . . .

Kennecott Copper corporation announced a cash distribution of \$2.25 a share, payable December 19. That brought payments for 1950 to \$5.50 compared with \$4.00 in 1949. At the same time it was indicated that operations at McGill and Ruth, Nevada, are being examined with a view to increasing production there. — *The Mining Record*.

Tonopah, Nevada . . .

Hundreds of shut-down lead and zinc mines in the Southwest will be opened this year when the government starts buying \$1,400,000,000 worth of strategic metals. This is the prediction of John H. East, Jr., regional director of the Bureau of Mines. "It will be the biggest thing that has happened in the West in many years," East said. "The lack of miners is the only limit as to how far we can go. There will be more jobs than we can fill." —*Tonopah Times-Bonanza*.

Inyo, California . . .

Completion by January was scheduled for a new crushing plant which will be an expansion of the U. S. Vanadium mill in Pine Creek Canyon. The new unit will make it possible for the firm to process scheelite and powellite ores from eastern California and Nevada. First shipment to the mill will be between 1000 and 2000 tons of table tailings from the Atolia district. Small lots of tungsten ore are being purchased in the area for processing. —*Inyo Independent*.

San Francisco, California . . .

The California Journal of Mines and Geology, Vol. 46, No. 3, is now

ready for distribution, according to Olaf P. Jenkins, chief of the state division of mines. This issue contains a description of the Needles magnesite deposit and the Capitan magnesite deposit in San Bernardino County, with a summary of the history and development work done on the Needles deposit. Other articles of interest to mining men are included. Price of the journal is \$1.00; it may be obtained by writing to the Division of Mines, Ferry Building, San Francisco 11, California.

Vernal, Utah . . .

Uranium ore has been discovered on property 16 miles east of Vernal on U. S. 40, and to test extent of the deposits a 100-foot shaft is being sunk to determine if the ore deposits are in depth or merely on the points of rocks. Samples will be taken from the shaft every two or three feet. —*Vernal Express*.

Winnemucca, Nevada . . .

Some high-quality opals recently have been reported mined by G. Keith Hudson at his Rainbow property in Virgin Valley near the Nevada-Oregon border. The mine was formerly owned and operated by Tiffany's of New York. —*Humboldt Star*.



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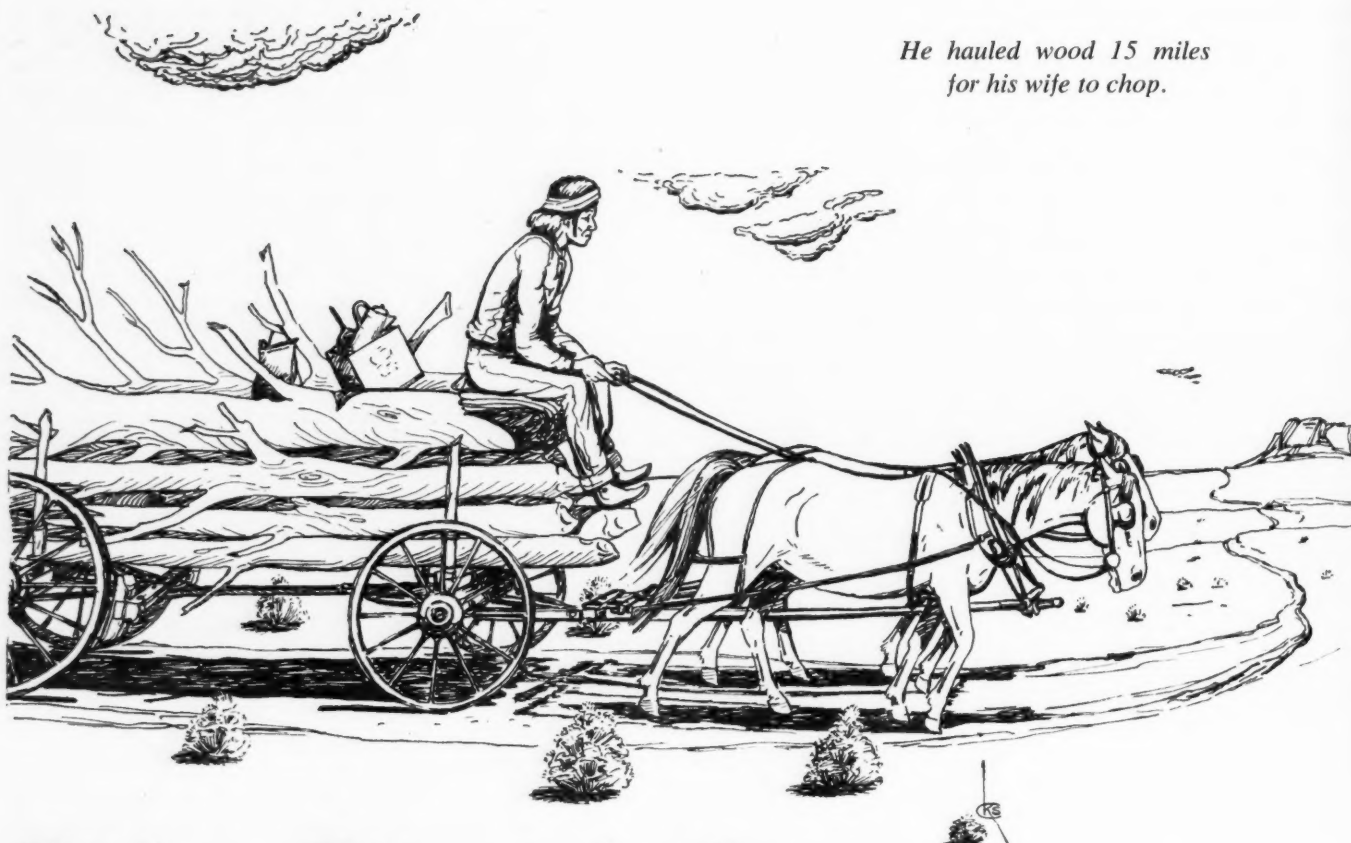
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*He hauled wood 15 miles
for his wife to chop.*

When Wealth Came to Hosteen Little-whiskers

By SANDY HASSELL

OVERNIGHT Hosteen Little-whiskers had become a person of importance. He realized this more than anyone else. Old acquaintances whom he had always addressed as "my friend" he was now calling "my son" and "my grandson."

The Big Boss at Washington had written many letters about him to the Superintendent of the Navajo Indian Agency at Whirling Water. The Superintendent had shown him all of these letters and had asked him many questions. He had been called into the office for more personal talks with the Superintendent than any other Navajo in the district. The talks were about the time when he had been a scout under General Miles and they were chasing Geronimo. How he loved to talk about those old times.

The Superintendent told him that if he could prove he had been a Scout he would get a pension check each month from Washington.

Much letter writing brought no results, so the Superintendent took him for a long ride of nearly 300 miles to Bear Springs, where some of his old comrades lived. He wanted to see if they could positively identify him. Yes, they all remembered him but like Little-whiskers himself they could not remember what name he had used when he was in the army.

The discharge papers they had given him when he left the army had been destroyed years before, but why should the Big Boss in Washington be so particular about such a silly thing as a name and a little piece of paper when everyone knew that he had been a Scout?

When the Superintendent asked him what name he had used in the army he said that the names he had used were like the women he had married, he couldn't remember them all. He had been married only twice but like all other old men he wanted everyone to think that he had been a regular rascal in his younger days.

An inspection of the Company records showed a Navajo named Black Horse had enlisted and had been dis-

charged but was otherwise unaccounted for. Little-whiskers remembered that he had owned a black horse at that time so that name was given to him.

Little-whiskers not only received his pension but more than \$1000 in back pay. The Superintendent knew that this was too much money for a Navajo to spend all at one time, so the back pay was kept in trust and was to be given to him in small amounts, and only when needed.

The first pension check was received and spent. In a few days he was back and wanted \$50 of his back pay. His request was granted but the Superintendent thought it best that he should be given an order on the trading post near by for provisions. Then the money would not be gambled, given away, or squandered.

An order for \$50 worth of provisions was given to the trader. When the trader explained to Little-whiskers that the order was for groceries only it was like touching a match to powder. Little-whiskers was a man of influence now and had money at his command. He had a right to say how his own money should be spent.

The explosion was preceded by a long indrawn breath. "Hah daasch" (why so)? "Why should I be asked to buy something to eat when I have two wives who have many sheep and are good weavers? I own the horses that they ride and drive; I haul wood for them to chop and water to cook with. The water is five miles away and the wood is 15. These are a man's duties. The Superintendent is not only foolish but very unreasonable to ask me to buy food with my pension."

The trader held a hasty conference with the Superintendent and when the error had been explained the official good-naturedly changed the order to read "merchandise."

The \$50 was soon spent. Little-whiskers seldom asked after a purchase—as is customary among Navajos—"how much is left?" His sole object seemed to be to spend it as quickly as

possible. He knew there was more where it came from.

Most of his buys were things that his women-folks could use or wear. Plush cloth for blouses that cost seven dollars each and piece goods for skirts at three yards for a dollar were among his purchases. He was satisfied with only the very best. How he gloried in this new-found importance. Now all of his opinions about which cloth was the best and what color was the prettiest were thoughtfully considered by his wife and agreed with—instead of being totally ignored as they usually were when she was buying with her own money. A clean shirt to put over his others and a big black neckerchief were about the only purchases he made for himself. And then to show that he was not only thoughtful but a good provider, he bought his wife a new ax.

TRUE OR FALSE

Desert Magazine's monthly quiz is a liberal education in the facts and lore of the desert country.

It touches many subjects—history, geography, mineralogy, botany, Indian life, and the literature of the Southwest. Some of those who make high scores every month have gained their knowledge from travel, others from books—and both groups find the desert an interesting world to know about. A score of 12 to 14 is fair; from 15 to 17 good, 18 or over is excellent. Answers are on page 39.

- 1—A rattlesnake has no bones in its body. True..... False.....
- 2—Great Salt Lake is the largest inland body of water west of the Rocky Mountains. True..... False.....
- 3—Mesquite trees have no thorns. True..... False.....
- 4—The desert Kangaroo rat carries its young in a pocket in its skin. True..... False.....
- 5—Indian petroglyphs are found only on rocks facing the east. True..... False.....
- 6—Coal is mined in New Mexico. True..... False.....
- 7—Father Garces often accompanied Father Kino on his missionary journeys in what is now southern Arizona. True..... False.....
- 8—Juniper trees are never found growing in their native state below sea level. True..... False.....
- 9—The Virgin river is a tributary of Lake Mead. True..... False.....
- 10—Desert Indians gather piñon nuts by climbing the trees. True..... False.....
- 11—Death Valley Scotty does not live in the palatial castle in Death Valley which bears his name. True..... False.....
- 12—The Natural Bridges National Monument is in Utah. True..... False.....
- 13—The cereal used by the Hopi Indians in making piki is corn. True..... False.....
- 14—Coronado came to New Mexico in quest of the fabled Seven Cities of Cibola. True..... False.....
- 15—Prescott, Arizona, is one of the towns along the highway known as The Apache Trail. True..... False.....
- 16—Furnace Creek Inn in Death Valley National Monument is operated by the National Park Service. True..... False.....
- 17—Chimayo blankets are woven by the Navajo Indians. True..... False.....
- 18—The historic Piper's Opera House was located at Goldfield, Nevada. True..... False.....
- 19—The volcanic rock known as obsidian is always black in color. True..... False.....
- 20—Woodpeckers sometimes drill their nesting holes in Saguaro cactus. True..... False.....

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You Want a Jackrabbit Homestead? . . . Here's How!

5-Acre Leases Now Limited to 3 Years

Rules issued by the Department of Interior governing the lease and sale of Jackrabbit Homesteads under the Small Tract Act of 1938 are changing constantly. The information published on this page will bring Desert Magazine readers up to date regarding the procedure for acquiring land under the Act:

Paul B. Witmer, manager of the U. S. District Land Office in Los Angeles, recently gave out figures which disclosed the growing popularity of the 5-acre homesteads—the so-called Jackrabbit Homesteads—since the passage of the Small Tract Act by congress in 1938.

To date, more than 12,000 applications for homesteads have been made through the Southern California Land Office.

Two hundred deeds have been issued to homesteaders who have made the necessary improvements on their land, and 104 applications for deeds are now pending.

More than 500 of the applicants have erected cabins on their 5-acre tracts.

Witmer called attention to a number of changes which have been made in the rules governing the lease and sale of these homesteads in recent months. The lease period which formerly was five years, has been reduced to three years. The filing fee remains at \$5.00 and the lease \$1.00 an acre a year—payable for the three years in advance. The lease carries an option to buy.

Application may be made for purchase of the land any time after adequate improvements are made on the land. The improvements must include a dwelling approved by the federal agent who appraises the property. There is no fixed minimum cost—but the cabin or house must be a substantial place of abode. House trailers are acceptable only if placed on a permanent foundation.

The sale value of the land is not fixed until application is made for purchase. Then a federal appraiser inspects the property and sets the value of the acreage. In a majority of cases the price has been \$10 to \$20 an acre, although in a few instances it has been as high as \$50 or even \$75 an acre.

If improvements are not made within the 3-year lease period the land

Following is the complete text of the Small Tract Act of 1938.

AN ACT

To provide for the purchase of public lands for home and other sites.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Interior, in his discretion, is authorized to sell or lease, to any person who is the head of a family, or who has arrived at the age of twenty-one years, and is a citizen of the United States, or who has filed his declaration of intention to become such a citizen, as required by the naturalization laws, a tract of not exceeding five acres of any vacant, unreserved, surveyed public land, or surveyed public land withdrawn or reserved by the Secretary of the Interior for any other purposes, or surveyed lands withdrawn by Executive Orders Numbered 6910 of November 26, 1934, and 6964 of February 5, 1935, for classification, which the Secretary may classify as chiefly valuable as a home, cabin, camp, health, convalescent, recreational, or business site in reasonably compact form and under such rules and regulations as he may prescribe, at a price to be determined by him, for such use: Provided, That no tract shall be sold for less than the cost of making any survey necessary to properly describe the land sold; that no person shall be permitted to purchase more than one tract under the provisions of this Act, except upon a showing of good faith and reasons satisfactory to the Secretary, and that patents for all tracts purchased under the provisions of this Act shall contain a reservation to the United States of the oil, gas, and other mineral deposits, together with the right to prospect for, mine, and remove the same under such regulations as the Secretary may prescribe: Provided further, That this Act shall not apply to any lands in the Territory of Alaska.

Approved, June 1, 1938.

reverts to the federal government and is open for re-entry. However, in some instances an extension of one year has been granted.

The leases are not transferable. However, in a number of instances lessees have sold their claims by relinquishment. To make such a sale the lessee files written notice of his desire to surrender his lease. In practice, this notice is taken to the Land Office by the purchaser, who immediately establishes his own claim by making application for a new lease on the property.

Witmer called attention to the fact that over 200,000 acres of federal land which recently have been withdrawn from the Joshua Tree Monument in San Bernardino County, California, are now available for entry either as mining claims or as jackrabbit homesteads. War veterans have a 90-day prior right of entry on this land. In other words, if an applicant who is not a veteran files for five acres under the Small Tract Act, the application is held 90 days before lease is granted. During that 90-day period any veteran may establish a prior claim on the land. However, with so much federal land available this is not a serious obstacle in actual practice.

Here's Guide for 5-Acre Applicants

You are one of a million Americans who would like to have a home or cabin on your own land.

Uncle Sam still has over 160,000,000 acres of land in his public domain—and many millions of these acres are available for private ownership under the Small Tract Act of 1938.

Your first step is to select your site. Then you go to the U. S. District Land office in the state where the site is located to determine whether or not it is vacant public land, and if it has been surveyed. Most of the accessible public land in the United States has been surveyed—that is, iron posts have been set at the section and quarter-section corners marked with the section, township and range of that parcel of land. Sometimes those posts are hard to find, but it will simplify matters if you will search the terrain until you locate one of them.

If you can locate the survey posts and obtain a legal description of the site, you may carry on your dealings with the District Land Office by mail. But do not write to the Land Office and ask them if they know of any good sites near Squaw Spring or on the Mojave desert. Nor can they send you a map. The Land Office has maps of every township in the region—but they are being changed every day, and printed copies are not available for distribution. Unless you can obtain a legal description of the land you want, you will have to make a personal visit to the Land Office where you will have access to all the information available.

Perhaps the land you want has not been classified as available for Five Acre Tract claimants yet. Go ahead and make your application anyway. And get some of your friends and neighbors to file also, for field men will not be sent out to inspect and classify a section of land until ten applications are on file for tracts in that section.

Your application is made in duplicate on forms supplied by the District Land office—one tract to each adult single person or head of a family—no more. With the application you enclose a fee of \$5.00 as evidence of good faith.

There are some lands in Southern California already classified and ready for leases. You can learn the location of these lands at the District office.

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You may even file your application without inspecting the land—but it isn't advisable unless you know others who already have filed on adjoining tracts and are willing to act on their recommendation.

It may require many months before you get action on your application, even after the land has been classified. But just take it easy, for while Uncle Sam is sometimes very slow, he also is very trustworthy.

Your lease, when it arrives, will be for three years, and then you have to remit \$15—a dollar an acre a year. There is no specified amount to be spent for improvements, but you have to put up a cabin and make the property orderly and attractive before it will be approved for sale to you at a price to be determined by the inspectors after the improvements are made. You have to have considerable faith in the fairness of your Uncle Sam's inspectors to go ahead on this basis, but after all they have no personal interest in being otherwise.

Applicants should understand that good agricultural lands for homesteading are no longer available—they've long ago been taken up under the homestead laws. Remaining lands which are now available under the Small Tract Act are mostly arid terrain without water or soil suitable for intensive cultivation. As a source of livelihood they have little or no value. As stated in the Act they are classified "chiefly valuable as home, cabin, camp, health, convalescent, recreational or business." There is no requirement as to continuous residence on the tract. After government patent is issued they may be bought and sold the same as any other real estate, but mineral rights are reserved to the federal government. However, if the lessee discovers minerals on the property, he has the same privilege as any other American citizen of filing on the mineral rights.

The intent of the law is to open the remaining public domain for any legitimate use the people of the United States desire to make of it.

Formerly these lands were under the jurisdiction of the U. S. Land office, with a registrar in charge of each regional office. More recently the term "U. S. Land Office" has been abolished and its functions taken over by the Bureau of Land Management. Regional offices have become District Land offices, and the registrars have become "acting managers." The location of these offices in the five southwestern states is as follows:

Southern California, as far north as Kern county: U. S. District Land of-

HERE AND THERE . . . on the Desert

ARIZONA

Priceless Archeological Collection

GLOBE—The Gila Pueblo archeological collection, valued at \$1,000,000, has been presented to the University of Arizona at Tucson by Mr. and Mrs. Harold Gladwin, Santa Barbara, California. In addition the university receives the physical plant of Gila Pueblo, with its museum and laboratories at Globe, and all equipment and records.

The prehistoric period in the Southwest from 15,000 B.C. is covered in the collection. There are more than 10,000 pieces of pottery and prehistoric artifacts of bone, stone and fiber—including weapons, tools, baskets, sandals, textiles and ornaments. Gila Pueblo was founded by the Gladwins in Globe in 1928 on the ruins of a 600-year-old Indian pueblo. Since then it has been the center for archeological research. More than 8000 sites have been explored, detailed records and photographs of each have been made.

Most of the priceless collection will be housed at the Arizona state museum on the university campus at Tucson.—*Tucson Daily Citizen*.

• • •

Plenty of Open Spaces . . .

WICKENBURG—Forty miles west of Congress on the Santa Maria River lies the famous Palmerita ranch, embracing more than 200 sections—128,000 acres—and one of the oldest and largest cattle ranches in west central Arizona. Two other rivers, the Bill Williams and the Big Sandy, run through the ranch. It is 15 miles from the ranch gate to the ranch house.

H. E. Gaunt, Wickenburg banker, recently sold his interest in the ranch to Boff Howard and Horace Maxwell, both winter residents of Wickenburg. Name of the ranch has been changed to Three Rivers ranch.—*Wickenburg Sun*.

fice, Postoffice building, Los Angeles.

Northern California, Kern county and north: U. S. District Land office, Sacramento, California.

Arizona: U. S. District Land office, Phoenix.

Nevada: U. S. District Land office, Carson City.

Utah: U. S. District Land office, Salt Lake City.

New Mexico: U. S. District Land office, Las Cruces.

To Coax Rain from Skies . . .

TUCSON—A rain-increasing program for three counties of southeastern Arizona was scheduled to start last month under direction of Dr. Irving P. Krick, meteorologist and president of the Water Resources Development corporation, Pasadena, California. Included in the proposed project were Pima, Santa Cruz and Cochise counties, with the possible addition of Graham and Pinal counties.

The rain-producing program, Dr. Krick said, would increase the region's income from cattle by \$3,500,000 per year. "We know we can increase natural rainfall by at least 75 percent in the area," Dr. Krick stated. "This will enable ranchers to increase the number of cattle on their range lands by at least 50 percent. This would increase the cattle income from \$7,000,000 to \$10,500,000, figuring on the basis of an average value of \$200 per head." Dr. Krick said his estimates were based on results obtained over a comparable area in northeastern New Mexico last summer.

The Southeastern Arizona Weather Research association was to sponsor the new project. Ground generators, controlled from the Pasadena laboratories and operated by field technicians from a local base, are employed to vaporize silver iodide into the atmosphere and produce rainfall when conditions are right. The program was not started in December because it would have interfered with the cotton harvest. Because of other agricultural problems, there will be no rain-making activities during April, May and June.—*Tucson Daily Citizen*.

Historic Colorado River Boat . . .

GRAND CANYON — A 16-foot flat-bottom boat which in 1909 braved 1300 miles of the unpredictable and dangerous Colorado River from Green River, Wyoming, to Needles, California, is being shipped from Ohio to the Grand Canyon National Park museum. Ohio's state museum at Columbus approved the transfer when they learned the boat is an important link in the National Park historical display on navigation of the Colorado.

Julius F. Stone, late Columbus industrialist, and three companions made the rough trip from Green River to Needles in rowboats, starting on September 12, 1909, and landing at Needles on November 19, 1909 — two months and one week later. They followed the course taken by Major

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MISCELLANEOUS

PROSPECTORS AND ROCKHOUNDS WANTED. To join the newly incorporated United Prospectors Organization. If you are experienced or beginners the articles in our magazine are bound to help you enjoy your hobby and the outdoors. Send your name for our new brochure and literature. United Prospectors, Box 729, Lodi, California.

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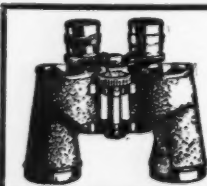
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LADY GODIVA "The World's Finest Beautifier." For women who wish to become beautiful, for women who wish to remain beautiful. An outstanding desert cream. For information, write or call Lola Barnes, 963 No. Oakland, Pasadena 6, Calif. or phone SYcamore 4-2378.

OLD WESTERN outlaw photos, \$1.00. 20 different Old West, Pioneer, etc., photos, \$1.00. 10 different battle of Wounded Knee 50c. 5 different Lincoln 25c. Lists 5c. Vernon Lemley Store, 302 Dallas Ave., Mena, Arkansas.

SILVERY DESERT HOLLY PLANTS. One dollar each postpaid. Greasewood Greenhouses, RFD, Barstow, California.

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"GOLD PANNING FOR PROFIT." Healthy outdoor hobby. Beginners big illustrated instruction book—\$1.00. Miners' gold pans, \$2.00. Prospectors' powerful magnifying glass, \$1.00. Package black sand and real gold, \$1.00. Desert Jim, 627 Lillian, Stockton, California.

MANY CANADIAN Indian baskets and relics. The cream of 40 years collecting. Mary Brown, 2319 Henry St., Bellingham, Washington.

RICHFIELD STATION, truck stop, cafe, motel showing good profits. Will sacrifice fixtures and inventory. Lease has 5 years to run with option to renew. Located on busiest east-west hwy. 60 & 70, Clarence Shaw, Salome, Arizona.

OLD FORT HUACHUCA Military Reservation now owned by State of Arizona has ideal dust free year-round climate. Unfurnished living quarters available at monthly rentals from \$10 to \$75. Come select yours or write for more details. Fort Huachuca Enterprises, Inc., Fort Huachuca, Arizona.

REAL ESTATE

INDIAN TRADING POST: California's most beautiful Indian Trading Post for sale. Pine Valley, California—on transcontinental Highway 80, 45 miles east of San Diego and 75 west of El Centro, in the mountains, elevation 3700 ft. In the fogless belt with a marvelous climate. 1000 sq. ft. store building of adobe brick with tile roof, huge beam ceilings and open fireplace. Thirty-ft. store front, huge parking space. Typical Trading Post signs, Katchinas etc. Sales room 19 x 30, rug room 13 x 16. We handle only genuine Indian merchandise. This is really a treasure trove of all things Indian. Navajo rugs, Indian jewelry, baskets, pottery, bead work and world-wide imports of the highest class. Does a large all-year volume of business. Seven-year lease at \$75.00 per month. Being on transcontinental highway 80 has a large all-year-round volume of traffic. Don't forget that the 1953 World's Fair to be held in San Diego is sure to pull crowds of people past this post. Address, Indian Trading Post, Pine Valley, California.

HOT MINERAL WATER: Heated by Nature. Five acres with Hot Water guaranteed only \$2500. \$500 Down, 5 years to pay. On Dillon Road 12 miles NE of Palm Springs. Would you like a cheap piece of Desert Land—in a good location? Fun Valley NE of Palm Springs. Five acres for just \$350. Terms. \$3990 buys a well constructed house—FHA. One bedroom. Only \$500 down. It's the bargain of the desert. Dos Palmas Tract—only 8 miles NE of Palm Springs. R. H. McDonald, Cor. of Dillon & Palm, Box 21, Desert Hot Springs, California.

J. W. Powell in 1869 through the rapids and canyons of the Green and Colorado rivers.—*Los Angeles Times*.

Arizona Tops Florida Sunshine . . .

PHOENIX—Arizona has as much sunshine as Florida during the winter months of December and January and is far ahead for June, according to figures compiled by a motor car company which was testing glass for use in automobiles.

Arizona, according to U. S. weather bureau records for the last half century, can expect 200 to 225 hours of sunshine in each of the winter months, equal to Florida. But in June Arizona should get from 300 to 400 hours of sunshine while Florida can expect only 275.—*Tucson Daily Citizen*.

Higher Grazing Fees Asked . . .

WICKENBURG—An increase of 50 percent in grazing fees on federal grazing district lands in Arizona has been approved by the Stockmen's association which met recently in Phoenix. The action made the recommendation unanimous for all western states where there are Taylor Grazing Act lands, according to Ed Pierson, chief of the division of range management.

Reason for the recommended increase is to make grazing lands pay their own way. Under a proposed new schedule, the permit fee would be upped from 8 cents an animal unit per month to 12 cents. One cow or five sheep is considered an animal unit.—*Wickenburg Sun*.

New Desert Road Survey . . .

KINGMAN—A survey crew of the U. S. Bureau of Public Roads is now in the Lake Mead National Recreational Area to make a construction survey for a road from Davis Dam on the Colorado River to the Katherine Mine recreation and concession site on Lake Mojave. The recreation site is three and one-half miles north of Davis Dam on Arizona side of the river. Construction of Davis Dam has created Lake Mojave, which will increase the recreational facilities in that desert region.—*Mohave County Miner*.

FLAGSTAFF — Arizona's annual state-supervised buffalo hunt ended in December with 92 hunters making kills. The hunt was held for three days on Raymond ranch 40 miles southeast of Flagstaff. Forty-seven bulls and 45 cows were killed. Twenty-three hunters went out each day. Included were six women and two 12-year-old boys.—*Coconino Sun*.

CALIFORNIA

Date Festival Dates Announced . . .

INDIO — The 1951 Riverside County Fair and National Date Festival, nationally-known for the colorful Arabian Nights pageant which is staged on a \$25,000 outdoor Arabian stage, will be held this year February 16 to 22 inclusive, it has been announced. The lavish production is presented by residents of Coachella Valley, has a cast of more than 100.

The fair features the products of the irrigated desert valley which produces fruits and vegetables while much of the nation is shrouded under snow. Coachella Valley produces 90 percent of all the dates grown in this country.—*Indio Date Palm*.

Indian, 129, Still Works . . .

INDIO—Louis Levy, a Mission Indian who lives on the Mono reservation in Coachella Valley, is believed to be the oldest living man in the United States. He claims to be 129 years of age, and Father F. A. Collymore of Coachella believes the claim is accurate. Levy's parents were converted to Catholicism through the work of the Franciscan missionary, Father Junipero Serra, who died in 1784, the present day padre says, and there are other circumstances to substantiate Levy's age.

When Levy was born in Coachella Valley, one-time home of the Cahuilla Indians, there were no white men in the region. Levy remembers the war with Mexico which resulted in purchase of California by the United States. He was in his twenties at that time. He recalls the covered wagons which crossed the desert on their way to California's gold fields.

The aged Indian still makes frequent trips into the town of Coachella and during the vegetable harvesting seasons he gets up early with the family and goes into the fields. — *Indio News*.

Wild Dogs on the Desert . . .

THOUSAND PALMS — Fifteen Russian wolf hounds, running half-starved on the open desert near here, created a serious problem until authorities took a hand and were finally able to capture the fleet and elusive animals following numerous complaints. The dogs reportedly had bitten at least seven people, destroyed irrigated crops, chased away wild game and forced a school bus to detour three miles from its route daily. Owners of the dogs were living in a temporary camp and permitted the dogs to run wild, county authorities said.— *Desert Sun*.

Mexico Bids for Tourists . . .

CALEXICO — Making a bid for tourist trade and to encourage frequent trips by fishermen to the Gulf of California, Mexico has announced that tourist permits issued for Lower California will now be good for a period of six months, allowing the permit holder to cross the border as many times as he likes during that period. Up to announcement of the new ruling, a permit was required for each trip if the visitor went into Mexico beyond the immediate vicinity of Mexicali. Cost of the permits is \$3.

The ruling is expected to increase tourist travel to the Gulf of California over the recently-completed paved highway from Mexicali to San Felipe. Fishermen go to the gulf after many kinds of fish, including the famed to-tuava—Mexican sea bass. This fish is indigenous to waters of the Gulf of California.—*Calexico Chronicle*.

Long-Sought Desert Road . . .

CALIPATRIA — Completion next summer of the North Shore Road around Salton Sea, designated as Highway 111, will provide a paved alternate route into the rich irrigated Imperial Valley and will result in a 25-mile saving in driving distance from north end of the Valley to Indio and the Los Angeles area. Improvement of the North Shore Road has long been sought by residents, ranchers and business men of the Niland and Calipatria area. The new road will make more accessible a scenic desert region missed by most people who stayed on Highway 99, which runs south of Salton Sea, when they drove to or from Imperial Valley.—*Calipatria Herald*.

Branch Courthouse for Indio . . .

INDIO — Near the fairgrounds where the famed Riverside County Fair and National Date Festival is held each year, a branch Riverside County courthouse is to be built in Indio. Contract for the new building has been awarded. The buildings will carry out the Arabian motif of adjacent Date Festival structures. The branch offices will include a justice court, sheriff's substation and jail, will serve the desert areas of Riverside county which are far from the county seat at Riverside.—*Indio News*.

Arizona Project Delayed . . .

WASHINGTON — California won its fight to delay construction of the controversial Central Arizona project when the house public lands committee voted a ban on the project until

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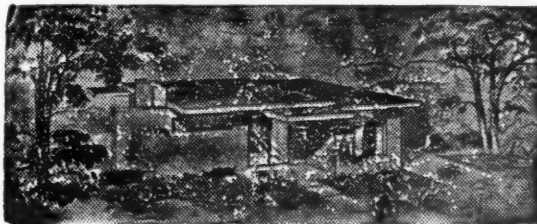
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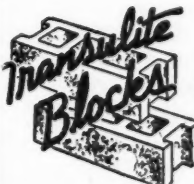


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congress has authorized certain other projects. Specifically mentioned were de-silting projects above the proposed key dam at Bridge Canyon.

The proposed Central Arizona project has brought to a head the California-Arizona fight over waters of the Colorado River — *Imperial Valley Weekly*.

Desert Communities Combine . . .

PALM DESERT—The two desert communities of Palm Village and Palm Desert, located 13 miles east of Palm Springs on Highway 111, have been officially combined under the name of Palm Desert. Up to time of the change, Palm Village was north of the highway, Palm Desert was south of the highway at the foot of the Santa Rosa Mountains. Palm Desert has a postoffice, a school, church and fire station.—*Indio News*.

PALM DESERT—A larger post-office is expected to be built in the new desert community of Palm Desert, 13 miles from Palm Springs, to replace the class 2 structure erected soon after the Palm Desert development was opened by Cliff Henderson.

BLYTHE—Number of motor vehicle passengers logged through Blythe, the desert gateway to California's Coachella Valley and the coast, topped 1,750,000 for the year 1950, according to figures released by the state Department of Agriculture, Bureau of Quarantine.—*Indio Date Palm*.

Pinon Incense...

Bring the delightful fragrance of the Pinon Forest into your home or office. The burner is a miniature model of the outdoor baking ovens used by prehistoric Indians, and still in use in New Mexico pueblos. When the little cones of genuine pinon pine are burned in this tiny oven the aroma is a breath of the outdoor Southwest.

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NEVADA

Significant Archeological Find . . .

LOVELOCK — Anthropologists from the University of California have uncovered implements fashioned by primitive man in about 5000 B.C., the most ancient reported so far in the western hemisphere. The prehistoric cache was discovered in a dry shelter at the base of an overhanging cliff near Lovelock. The find was made by students working under Robert F. Heizer, associate professor of anthropology at the university.

The age of wooden spear shafts buried under deposits of rock, dust and bat guano was determined by the "carbon 14" method. The shafts were estimated to be from 7300 to 9000 years old. In upper layers the archeologists found basket and arrow fragments dating back about 2500 years — of relatively recent origin.

From these findings and a survey of other sites in the area, scientists now believe that most of western Nevada was once covered by a fresh glacial lake probably 600 feet deep. The area was first occupied by man between 7000 and 9000 years ago after the lake had receded, and then was abandoned because of a dry weather cycle.

Evidence indicates the area was not occupied again until 2500 or 3000 years ago. Inhabitants of the region during those later periods were ancestors of the Paiute Indians, but identity of the earliest group is not known.—*Orem-Geneva Times*.

Mapping Desert from the Air . . .

HENDERSON — Many of the remote regions of the Southwest desert have been invaded by the modern prospector armed with Geiger counter and ore testing equipment, but southern Nevada had something new in store when surveyors of the United States geological survey arrived with helicopters and two-way radios.

To map this rugged region, the surveyor no longer has to scramble to the highest point, his transit on his shoulder and signal markers under his arm. The modern surveyor steps into a helicopter with a handi-talkie in one hand and is flown to the highest peaks. There he steps out and starts to work. The helicopter will pick him up later. Down below the rest of the surveying crew moves along in trucks, carrying radio receivers and transmitters.

Original maps of the U.S.G.S. were made in 1906 and edited in 1908. Since then there have been many changes in topography of the country. Lake Mead and Hoover dam have been added by man, towns like St. Thomas — on the original map — have disappeared. Boulder City and Henderson have come into being. Stream beds

have shifted, erosion has changed the face of the land. Old roads have disappeared, new roads have been built. Old mines have been abandoned, new ones have been opened. The new maps will show the arid region as it is today.—*Las Vegas Review-Journal*.

Davis Dam in Operation . . .

BOULDER CITY — Davis Dam, the fourth largest hydro-electric power plant in the United States (*Desert Magazine*, May '50), began generating electricity soon after first of the year and is adding its output of commercial power for Southwest users to the Davis-Parker Dam transmission system.

Davis Dam is on the Colorado River 67 miles below Hoover Dam, backs up Lake Mojave almost to the foot of Hoover Dam. The Davis power plant is located 34 miles west of Kingman, Arizona. Workmen are continuing installation of the huge 45,000-kilowatt generators, one of which is expected to go into operation each month until by next summer all five will be operating at full capacity.—*Las Vegas Review-Journal*.

Enjoy Outdoors Without Killing . . .

AUSTIN — People are going to have to learn that the measure of enjoyment obtained from hunting and fishing is the amount of outdoor recreation obtained rather than the number of pounds of fish or the quantity of game brought home.

This is the conclusion of Dr. Ira Gabrielson, former director of the U. S. Wild Life Service, who spoke recently before the Nevada Associated Sportsmen. The trouble, he said, is that there are more and more people who want to hunt and fish, and less and less territory where fish and wild life can thrive. Since 1940, he said, the number of fishing and hunting licenses issued in the United States has doubled. At the same time forests are being cut away, streams polluted and much wilderness is being invaded. One hope is that people may learn to enjoy wild life without the urge to kill.—*Reese River Reveille*.

Bombing May Endanger Cattle . . .

WINNEMUCCA — The vast expanses of the open desert are ideal for gunnery and target work, but the Black Rock desert in western Humboldt County is also used as cattle range, so the proposed reactivation of the Black Rock aerial gunnery range presents problems to cattlemen in the area.

Following reports that the nation's preparedness program may include reactivation of the one-time target range, the Humboldt County chamber of commerce has appealed to Senator

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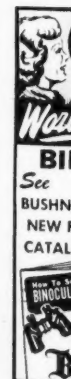
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Pat McCarran asking for full protection of the interests of cattlemen and others in the area. The question of liability is one that will need to be settled. There is no housing in the Black Rock desert that would be endangered by bombing, but cattle do run the range.—*Humboldt Star*.

STEWART — Ralph M. Gelvin, superintendent of the Colorado River agency, Parker, Arizona, is acting temporarily as superintendent of the Carson Indian agency here. Gelvin replaces E. Reese Fryer, who was appointed to a state position.

AUSTIN — Complaints that jack-rabbits have caused extensive damage in many Elko County areas has resulted in action by the Nevada Fish and Game commission to take the white-tailed jackrabbit off the game animal list. The jacks may now be killed at any time without limit or restriction.—*Reese River Reveille*.

NEW MEXICO

Indian Integration Proposed . . .

GALLUP—Best hope for ultimate solution of many Indian problems lies in integration of the American Indian into the white man's life, both socially and economically. This was the opinion of delegates to the governors' interstate council on Indian affairs, which met recently in Oklahoma City.

The education committee in its report stressed integration as the only final solution, along with a request that education of Indians be turned over to the states as rapidly as possible. A general and adequate education program, it was pointed out, is a primary need of the tribesmen today. The Navajo-Hopi reservations in Arizona and New Mexico are an example of the need. There are 24,000 Indian children of school age there, the council was told, but facilities to educate only 8000.—*Gallup Independent*.

Zuni Mudheads End Their Year . . .

ZUNI PUEBLO—The Zuni Mudheads, religious personages who work

all year long as sacred intermediaries with the Indian gods and who double as comics, buffoons and clowns, received their traditional pay-off at year's end.

The custom is for each of the 10 Mudheads to set up headquarters in the village and wait for the gifts to roll in. Their pay comes in the form of food, silver, cloth and other valuables. The Mudhead stands near his stack through the day, guarding his treasure and blessing those who contribute.

Each of the Mudheads belongs to a clan. The irony comes in when the Mudhead hauls his day's collection to his home. His clan brothers crowd around and each expects some gift, so the Mudhead usually ends up by dividing his presents among his followers.

The Mudheads act as humorists during tribal ceremonies, but they are revered as religious personages by their people.—*Gallup Independent*.

Indian Cattlemen Prospering . . .

WASHINGTON—In 1932 Indians owned 182,000 head of cattle, from which they derived about \$1,000,000 a year. Today they own nearly 400,000 head, producing an annual income of \$30,000,000, according to Dillon S. Myer, Commissioner of Indian Affairs. Indians are learning the rules of the highly competitive cattle business. Myer said, and are making money. They have always owned livestock, but not until the early 1930's did high-grade beef and dairy cattle figure materially in their livestock programs.

They've Found One at Last . . .

ALBUQUERQUE — In a remote section of the Capitan Mountains 130 miles southeast of Albuquerque deer hunters found an 18-inch metal sphere which after a month's investigation by scientists still had the experts stumped. Dr. Lincoln LaPaz, head of the institute of meteoritics at the University of New Mexico, has studied the mystery object along with many other investigators.

The sealed sphere apparently is made of duraluminum, a light metal, and is 18 inches in diameter. It weighs seven pounds. Dr. LaPaz believes the sphere either was ejected from a guided missile or that it was carried by a large balloon. Found with the sphere in a region seldom visited by humans were; an object which looks like a large flower pot and made of an unknown type of plastic, an alarm clock equipped with an expensive hair-trigger micro switch, and three packages of photographic film used in nuclear research.—*Gallup Independent*.

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Fare \$200 a person. Party rates \$200 for first person and \$150 for each additional member of party. Includes meals, bedrolls, waterproof containers for camera equipment.

SPECIAL TRIPS: May 31 and June 12 are the embarkation dates for two leisurely 10-day trips from Mexican Hat to Lee's Ferry. These trips designed especially for photographers and scientists who want extra time for exploration. Fare \$235 with reduced party rates.

" . . . A flight on the magic carpet of adventure into a canyon wilderness of indescribable beauty and grandeur." wrote Randall Henderson in the *Desert Magazine*.

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ALBUQUERQUE — Guy C. Williams has been transferred from chief of planning activities of the Bureau of Indian Affairs to the position of assistant director of the Albuquerque area office. He returns to the region where he entered the Indian Service 24 years ago as a day school teacher at Tesuque pueblo, 10 miles north of Santa Fe. Theodore W. Taylor has been named to take Williams' place with the bureau.

Salt Cedar Control Mapped . . .

CARLSBAD — A long-range program to develop effective measures for the control of salt cedar along waterways of the arid Southwest was tentatively mapped by representatives of 12 local, state and federal agencies when they gathered recently in Carlsbad. The group toured the Pecos River area, which is badly infested with salt cedar.

This is one of the first projects in the country aimed at control of salt cedar, which drinks up badly-needed water flowing in Southwest streams. Three control methods are being considered, treatment with chemicals appears to be favored.—*Eddy County News*.

Sheepmen Win Show Laurels . . .

LAS CRUCES—New Mexico residents are proud of their state in many ways, now have something else to crow about. New Mexico sheep breeders brought home more than their share of awards from the American Royal Livestock show at Kansas City. Seventeen fleeces entered by New Mex-

icans won the grand championship and 16 other prize ribbons. In addition there were other individual grand championship and class prizes, and several seconds, thirds and fourths.—*Gallup Independent*.

CARLSBAD — A \$35,000 expansion project is underway at Carlsbad Caverns National Park, including a 400-car parking lot for accommodation of visitors to the famed caverns.—*Eddy County News*.

A high per-acre cotton yield was predicted by the agriculture department for New Mexico this year. The state's production of 480 pounds per acre is high among cotton-producing states.

UTAH

There Are Birds on the Desert . . .

SALT LAKE CITY—Right in the middle of winter, Salt Lake County can boast a bird population of nearly 25,000, with 87 species represented among the birds which stayed for the winter rather than flying to the south for warmer weather.

These figures were the result of an annual bird census taken by members of the Utah Audubon society. The exact figure reported was 24,462—nearly 400 more than last year. Society members sloshed through swamplands, scrambled through brush, climbed along mountain ridges and explored nearby canyons to make the census. The count included 11 species of ducks and nine of hawks.—*Salt Lake Tribune*.

Appeal Court to Hear Case . . .

WASHINGTON — The San Juan County trespassing case involving alleged encroachment by Navajo Indians on grazing lands of white stockmen, will be taken to the U. S. court of appeal, the justice department has announced.

The appeal is on recent action of the U. S. court for Utah, which dismissed a trespassing charge brought against tribesmen who were accused of grazing their sheep without permits on federal lands under lease to whites. The Indians claim aboriginal rights, moved their flocks and families from the Navajo reservation to the grazing areas in Utah. The tribesmen have been urged to return to their reservation and await outcome of the court hearings and other litigation over Indian aboriginal rights to the land. Many responded and moved back across the San Juan River.—*Salt Lake Tribune*.

Too Many Deer in Mountains . . .

MONTICELLO — Despite special hunts and the killing of does, there are still too many deer in some parts of Utah. So forest service, land management and game officials joined forces recently to make a sex ratio count of deer on Elk Mountain, and the information will be used in determining the nature of next year's hunting season, and which areas are to be thrown open for special hunts.

It is believed there is still a heavy over-population of deer, both on the Monticello side of the mountains and on the Elk Mountain side. Deer last fall completely denuded brush and brouse in some sections and during the summer invaded crop lands.—*San Juan Record*.

Land Trade Is Proposed . . .

SALT LAKE CITY — More than 50,000 acres of state land within boundaries of the Navajo Indian reservation are to be traded for federal land elsewhere if a proposed transaction is carried out. A survey of reservation lands in San Juan County was scheduled to start in January. If the state can obtain land outside the reservation, revenue could be realized by leasing the land to stock owners.—*Salt Lake Tribune*.

More Range Land Reseeded . . .

MONTICELLO — Reseeding of 3000 acres in the Deer Flat, Hide Out Mesa and Horse Bench areas has been completed by the Bureau of Land Management immediately following a brush-killing campaign designed to give the grass a chance to establish itself. Another 1900 acres in Dry Valley have been reseeded and next year 1500 acres more on Deer Flat will be seeded to grass. The program is part of the bureau's efforts to reclaim range territory damaged by overgrazing and erosion.—*San Juan Record*.

New Bridge Across Colorado . . .

MOAB—A new bridge to span the Colorado River at Moab is on a list of 27 projects in the state which have been given No. 1 priority by the state road commission for construction during next fiscal year. Estimated cost of the bridge is \$770,000.—*Times-Independent*.

OREM — A shipment of 270,000 brook trout eggs has been received from Strassburg, Pennsylvania, at the Kamas hatchery, and next summer the fish will be taken into the primitive areas of the Uintah Mountains and placed in high lakes.—*Orem-Geneva Times*.

River Vacations 1951

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NEW DISCOVERIES ADD TO STORY OF PINTO MAN

New evidence of Pinto Man's existence, including a new archeological find of undetermined significance, has been discovered near Little Lake, California, only a quarter of a mile from excavations made by the Southwest Museum, Los Angeles, and described by Curator M. R. Harrington in the September, 1950, *Desert Magazine*.

Mr. and Mrs. Richard M. Esgate of Riverside and their three children—Florence, Charlotte and Dick—made a trip into the Little Lake country after reading in *Desert Magazine* about the museum work at Stahl site, named for Willy Stahl, discoverer of the Pinto village remains.

They camped about a quarter of a mile from the previous excavations, and there in a grassy pocket between the lava cliffs they found numerous relics and artifacts of Pinto Man. They collected obsidian spearheads—which Pinto Man used instead of bows and arrows—scrapers used to remove adhering tissue from the flesh side of animal skins before tanning, and some strange clay tablets—each with a different free-hand design. The clay tablets appear to have been fired in a kiln.

The artifacts and the clay tablets have been sent to the Southwest Museum to see if their significance can be determined.

Pinto Man roamed today's California desert thousands of years ago when the present arid regions were a green thriving forest and rivers ran full of water. Geologists say this could have been either in the Great Pluvial period at end of the Ice Age more than 10,000 years ago, or about 3000 to 3500 years ago during the Little Pluvial period.

WEATHER UNFAVORABLE IN MANY DESERT AREAS

Unfavorable weather conditions over much of the desert Southwest in recent months have created serious problems. In New Mexico some of the municipalities face the possibility of domestic water rationing unless rains come before summer.

On the Navajo reservation the Indians face the possibility of serious losses in some areas unless they market their sheep prematurely.

Utah reports a normal surface water supply, but serious freezes in some areas have threatened a reduction of next year's fruit crop. Great Salt Lake now has a surface elevation of 4197.8 feet, which is .85 foot above the same date a year ago. The lake has been rising for 10 years.

Picture of the Month Contest . . .

Each month during the winter and spring season *Desert Magazine* will award prizes for the best photographs taken in the desert country. Subject material is unlimited—landscapes, strange rock formations, unusual botanical pictures, wildlife, prospectors, Indians, sunsets and clouds—all these and many more invite the camera hobbyist.

Entries for the February contest must be in the *Desert Magazine* office, Palm Desert, California, by February 20, and the winning prints will appear in the April issue. Pictures which arrive too late for one month's contest are held over for the next month. First prize is \$10; second prize \$5.00. For non-winning pictures accepted for publication \$3.00 each will be paid.

HERE ARE THE RULES

- 1—Prints for monthly contests must be black and white, 5x7 or larger, printed on glossy paper.
- 2—Each photograph submitted should be fully labeled as to subject, time and place. Also technical data: camera, shutter speed, hour of day, etc.
- 3—PRINTS WILL BE RETURNED WHEN RETURN POSTAGE IS ENCLOSED.
- 4—All entries must be in the *Desert Magazine* office by the 20th of the contest month.
- 5—Contests are open to both amateur and professional photographers. *Desert Magazine* requires first publication rights only of prize winning pictures.
- 6—Time and place of photograph are immaterial, except that it must be from the desert Southwest.
- 7—Judges will be selected from *Desert's* editorial staff, and awards will be made immediately after the close of the contest each month.

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The Desert Magazine

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OUR DESERT NEIGHBORS

By Edmund C. Jaeger

For more than 40 years Edmund C. Jaeger has explored the desert—on foot, by burro, and in more recent years, by auto. He has visited its remotest areas, and made friends with its wildlife.

He writes of coyotes, kangaroo rats, tortoises and bighorn sheep, not in the manner of an academic scientist, but as their friend, who knows their habits of life. When he tells of his experience with a packrat, the little animal becomes a living character in the play of desert life.

The desert will hold a new meaning and a livelier interest for those who make acquaintance with its denizens through the eyes of Edmund Jaeger.

The author has autographed copies for *Desert Magazine* readers.

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THE *Desert* MAGAZINE

Palm Desert, California

LETTERS . . .

Corrections, Please . . .

Tucson, Arizona

Desert:

I have just read your story on the Pinacate region and would like to call your attention to two errors:

1—The official name of the town called Rocky Point is Puerto Peñasco, and this is the name used in the Mexican railway guide book.

2—The Sonoyta river does flow in flood into the *Gulfo de California*, regardless of what your informant may have said. I know because I have flown over the region twice and the dry river bed is visible from the air. There are three bridges across the river channels built for the railroad which runs along the gulf and thence to Caborca.

Happy New Year to the Desert staff.

JOHN F. MACPHERSON

Jackrabbit Homesteads in Barstow

Barstow, California

Desert:

We read your December editorial in regard to desert homesteads with much interest.

We would like to question one statement: "Then there is the necessity of spending at least \$300 for a cabin before Uncle Sam will issue a patent."

This used to be true. However the leases now read: "(b) to construct upon the land, to the satisfaction of the Regional Administrator, Bureau of Land Management, improvements appropriate for the use for which the lease is drawn."

This change is important. For in Barstow we have lands within and without the city owned by the government, on which people have filed under the Small Tracts act of 1938. It is apparent that the Small Tracts act should never have applied in this case. This land abuts on expensive subdivisions with houses ranging in cost up to \$12,000 and over. The regional administrator is the sole authority on whether the improvements made are "satisfactory" and "appropriate." Clearly a \$300 shack will not qualify. But before the average person can build a \$10,000 home he must secure a loan, and before he can secure a loan, he must have title to the property; and before he can secure title to the property he must build a home that the Bureau of Land Management rules is appropriate to the surround-

ing areas. Obviously, it doesn't make sense.

On top of this is the question of utilities, roads and other matters.

This government land within and without the city limits of Barstow is all filed on. Homesteaders will secure three-year leases, and it is apparent to us that nothing can and will be done to this land for three years. At the end of three or more years, someone else can file on it and also do nothing. Consequently it is obvious that this choice homestead property, ideal for subdivision, is tied up, in effect, forever.

As you stated, the Los Angeles office has issued over 12,000 applications for jackrabbit homesteads. The total in California is well over 20,000 applications issued since 1938. Yet, less than one percent of these applicants have followed through to secure a patent on their property. You state in your excellent editorial that about a dozen deeds are being issued every month. This is even less than one percent of the applications that have been taken out.

On raw desert land, the problem of utilities and roads is not too important. On this Barstow government land, these problems are all important. The government has the right at any time to put roads around a 33-foot perimeter around the homestead (in this case 1¼ acres, or 330 by 165 feet). This reduces the available land by a net of 66 feet. In addition, depending upon contours and connecting roads, the government or any political subdivision has the right to put roads anywhere through the leased ground. It is readily apparent that no one is safe building anywhere on his homestead within or without Barstow on these conditions; and until he improves the property he cannot secure a deed to the land.

We originally spoke of this chance to homestead lands within and without Barstow as a great opportunity for anyone to secure five acres of choice land. This has now been cut to 1¼ acres. We believe now that this great tract of land lying south of Barstow and within and without the city limits of Barstow, because of government restrictions that were never intended to apply in this case, will remain undeveloped forever.

CARYL KROUSER

Highway of Death . . .

Yuma, Arizona

Desert:

I was pleased to learn that your Desert Magazine party was able to make the difficult trip to the bottom of Elegante crater during such warm weather. That is an accomplishment

which merits considerable respect, especially since you did it without using ropes.

It is difficult for a person who has never been down to the ledge to understand just how steep the sides of the crater really are.

My descent was made at a point almost directly above the point at which you left the ledge to go straight down the rock slide to the bottom, but I made one 12-foot drop and later a 24-foot drop with the aid of ropes.

The route you followed to get to the crater is by far the best. Although Norton Allen's fine map shows the old road on the Mexican side which Jim Brock, Joe King and I followed in November of last year, we certainly would discourage anyone else from trying it because the area north of the Rosario mountains is simply soft sand and not unlike the dunes on Highway 80 west of Yuma. In many places we lost all trace of the ancient road and merely continued in the general direction we wanted to go.

We counted more than 14 graves and more than 25 abandoned automobiles along the road which stretches for about 100 miles from San Luis to the Sonoyta river bed. More than 50 people have died of thirst on this trail during the last 25 years. It has not been used since about 12 years ago when a bus broke down and several people died of thirst.

I hope sometime you will publish an article about the little known Hornaday and Cloverleaf craters also.

DR. PHIL A. BURDICK

When Cat Meets Rattler . . .

McNeal, Arizona

Desert:

Recently I witnessed a primitive encounter which may be of interest to *Desert Magazine* readers.

As I chored about the place one morning I became conscious of the ominous sound that only a rattlesnake can make. It came from our tool shed. When I opened the door cautiously, I saw a large rattler coiled just inside. In front of the snake, within easy striking distance of it, sat one of our mother cats, her tail lashing from side to side, her unsuspecting kittens dashing back and forth, trying to catch their mother's tail. The mother cat seemed to be holding the deadly snake enthralled by an intense, unwavering look.

Neither the snake nor the cats seemed to note my having opened the door. None of them seemed conscious of my presence. Evidently the snake had entered the shed, and the cat had stopped it short, placing herself between it and her kittens.

The snake was coiled tightly, its head was low, only its tail moved, and it showed no disposition to strike. When I killed the snake with a shovel, the mother cat immediately lay down to nurse her young kittens.

Later a young cat again demonstrated the above power over rattlesnakes. One night my wife heard that unmistakable rattle under one of the windows. She wakened me and voiced her fear that our young cat was in trouble. I got up quickly, went to the door, and we stepped out. There, close at hand, burned two rays of light—the eyes of our cat. The rattling sound seemed to come, not from a single point, but from everywhere.

I turned on a yard light and under the window we saw our young puss holding a huge rattler, seemingly spell-bound. Two or three times as I approached she made a slight movement as if about to act on an impulse to turn and come to me. In each such instance she quickly caught herself and tightened her attention to the snake. I believe she knew instinctively that if she failed to concentrate closely, the snake might strike before she could get out of its reach. When my first blow to the head stretched the snake, our wisp of a cat turned leisurely and came to rub nonchalantly against my legs, while I added a few extra blows to make sure that the snake stayed dead.

J. D. OLIVER

First to Run the Verde . . .

Winterhaven, California

Desert:

On page 31, December, 1950 issue of *Desert*, is news item from a Tucson, Arizona, paper telling of four men just recently making the first successful navigation of Arizona's Verde River Canyon. This is not quite correct.

In December, 1926, Earl Kerr, Cy Rollins and myself built a boat on the bank of the Verde River at Camp Verde, and announced our intention of going down the river to Granite Reef dam. The residents of the community tried to discourage us from making the trip. The proprietor of the general store told about an attempt his father had made to run the canyon 40 years before. He had to be rescued by pack horse.

Despite the stories of disaster awaiting us downstream, we loaded the boat with a two months' supply of groceries and shoved off. We found the stories only slightly exaggerated, for there was plenty of bad water.

Early in February, 1927, we reached Granite Reef dam, where the Verde joins the Salt River; dragged the boat around the headgate into the Arizona canal and floated down the canal to

Scottsdale, a suburb of Phoenix. Our bedraggled appearance aroused the curiosity of the people of the village and when our story became known a reporter soon was in our camp. The next day a Phoenix paper ran a front page story about the first successful boat trip through the Verde River Canyon.

ED ROCHESTER

Appeal for the Navajo . . .

Chinle, Arizona

Desert:

The missionary in this area tells me that many of the Navajo, and especially the children, are not well clothed for the cold weather this winter, and I will appreciate your passing along to your readers the suggestion that if any of them have used clothes which are in the closet feeding the moths, they could be put to a very useful purpose here. Packages addressed to me at Chinle will be distributed by the missionary and will be deeply appreciated.

MRS. C. E. SHANK

Reptiles in the Wrong Place . . .

Riverside, California

Desert:

Weldon Woodson's story about the Gila Monster was very interesting but he made the statement they are not found in California.

In May, 1949, my son and I spent several days west of Salton Sea and found one in an old claim marker. My son rolled a stone away and the Gila Monster came out after him and I shot it in the head with a .22 rifle. I also killed a poisonous coral snake. We have the Gila Monster preserved in alcohol. It looked more like a Mexican Gila Monster—black head, beaded body, and light tail.

C. A. POWERS

Desert's wildlife department suggests that you submit your lizard specimen to Edmund Jaeger of Riverside College, for positive identification. Since the coral snake is not a native of this desert area isn't it possible you killed a banded king snake? They are quite harmless, and generally regarded as beneficial to mankind.
—R.H.

My Husband's a Convert . . .

Indio, California

Desert:

Here's \$3.50 for another year of *Desert*. But please be careful what you print or I'm going to lose a darned good husband.

He used to be a "cityfied" man—thought the desert was the dullest place on earth. But he started reading *Desert Magazine*—and now he drags me out at 5:30 in the morning, fills the thermos bottle, and rolls down the

road to get out of town so he can see the sunrise—and all the time he is raving about the colors, the invigorating air and other wondrous things—that you and I have known about all the time.

My main worry now is that he is coming home one of these days with the car loaded down with grub, and tell me he is on the way to find one of those lost mines. If he ever gets that disease I am afraid he is a goner.

I might add: As soon as I can pry it away from him I am going to read your November issue.

MRS. P. G. FREESE

From the Land of Jumping Beans . . .

Baltimore, Maryland

Desert:

In the October issue of *Desert* I read Alberto Maas' letter about the Frank Byerly school in Sonora, Mexico, and how the children collect jumping beans which they sell. Perhaps *Desert's* readers would be interested in my experience in buying some of these beans.

Mr. Maas sent the beans in a little cotton bag and they arrived safely, and we got much enjoyment out of their antics. In appreciation for clothes I sent, I received a coaster set made of wild palm which grows near Alamos, Mexico.

Many thanks to *Desert* for its part in this pleasant experience.

EDNA PLANT

ANSWERS TO TRUE OR FALSE

Questions are on page 29

- 1—False. A rattlesnake has a vertebra of bone tissue extending nearly the length of its body.
- 2—True.
- 3—False. Mesquite trees are very thorny.
- 4—False.
- 5—False. Petroglyphs are found facing all directions.
- 6—True.
- 7—False. Father Kino's missionary work in the New World covered the period from 1683 to 1711. Father Garces traversed the desert 75 years later.
- 8—True. 9—True.
- 10—False. The Indians shake the nuts off the tree into a blanket, or gather them from the ground.
- 11—True. Scotty lives in a little cabin over the hill from the castle.
- 12—True. 13—True. 14—True.
- 15—False. The Apache Trail is a detour from Highway 60 to Roosevelt Dam.
- 16—False. Furnace Creek Inn is operated by the Death Valley Hotel company of Los Angeles.
- 17—False. The Chimayo weavers of New Mexico originally were Mexicans.
- 18—False. Piper's Opera House may still be seen in Virginia City.
- 19—False. Obsidian comes in many shades.
- 20—True.

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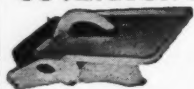
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AMATEUR GEM CUTTER

By LELANDE QUICK, Editor of The Lapidary Journal

(Continued from Last Month)

Last month's discussion of jade was concluded with a reference to New Zealand "greenstone," which is nephrite jade. The subject is thoroughly covered in a new English book by Elsie Ruff entitled *Jade of the Maori*. Several times we have read quoted remarks from club lecturers on jade to the effect that the New Zealand material is not jade but a gem in its own right. Others have been quoted as saying it is jadeite. Both popular ideas are in error as greenstone is definitely nephrite and no jadeite has ever been found in New Zealand. This author claims that no Maori today are working jade, and their own jade is held very lightly by New Zealanders themselves — perhaps because they never call it jade.

The same symbolism attaches to the Maori pieces as to the Chinese pieces—good luck. They do not believe it has any medicinal properties, as do all other races revering jade. It is reported that Field Marshall Sir Bernard Montgomery carried an ancient Maori jade piece from D-Day until victory in the last war. Like many of us he may have felt "if it doesn't do any good it can't do any harm." More and more amateurs are adopting the custom of carrying a jade fingering piece, not as a good luck charm particularly, but because all true rockhounds like to have "a piece of the earth in a pocket." Such people usually prefer jade for the purpose because of its indescribable feel. We always carry jade in our loose change.

The amateur wants to know where jade exists now. Both jadeite and nephrite occur in Turkestan but so little jadeite has ever been found there that one can say with near-truth that only nephrite exists there at this time. Jadeite and only jadeite occurs in Burma. No jade has been found in India or China but jadeite has recently been reported found at Katoki, Japan. We have the matter under correspondence with Japan's leading gemologist, Takeo Kume. Turkestan is now called Sinkiang and is under Red China.

Jade occurs in Europe in the Harz mountains in Germany; in southern Liguria, Italy; in Reichenstein, Silesia. At none of these locations does it occur in commercial quantities although blocks weighing more than two tons have been taken from the Silesian location in the past. The ancient Swiss lake-dwellers made many artifacts of jade believed to have come from the Silesian location.

Jade occurs at several widely scattered locations in New Zealand and exists on the island of New Caledonia. No jade is known to exist on the continents of Austria, Africa or South America. There is an unconfirmed report that a few pieces have been found at Humboldt Bay in Dutch New Guinea.

In North America jade occurs in Alaska, British Columbia, Mexico, California and Wyoming. All of this is nephrite with the exception of the jadeite found at Clear Creek, San Benito County, California, in 1950. The Monterey, California, jade was found in 1940 and jade of poor gem quality, because of a high iron content, was found near Porterville, California, in 1949. The exciting news just now is the reported

find of dark green nephrite and jadeite together; found as boulders in the North Fork of the Eel River in Trinity County, California. Isolated instances, apparently authentic, have been reported of small jade pebbles being picked up at many other California spots but all of them in northern California. It should be emphasized here that the "jade" from Happy Camp, often referred to as "California jade" is not jade at all but idocrase (vesuvianite), named Californite by George Kunz a half century ago.

The Alaskan jade occurs as boulders about 150 miles north of the mouth of the Kowak River in what has been called Jade Mountain since 1890. Labeling it as a recent discovery is an error. Nephrite boulders have been found in the Lower Fraser and Upper Lewes rivers in British Columbia. In southern California the report of jade discoveries is about as frequent as a new discovery of a cancer cure—and just as authentic. Jade pebbles have been picked up at widely scattered points on the Oregon beaches and at many spots in Mexico. The boulders of southern Wyoming, now nearly exhausted, are well known.

Jade artifacts have been found at many places where rough jade has never been found. They have been found in Ireland, Holland, Brittany, France, Spain, Italy, Asia Minor, Russia and Malta. More than 2000 jade specimens, estimated to be 6000 years old, have been fished from a single small Swiss lake.

The Chinese really started working jade about the time other peoples quit. The earliest Chinese objects go back about 8000 years and carving did not begin until about 5000 years later. Most speakers will relate how the Chinese word YU stands for jade. It does, but it stands for other hard materials too, especially gem materials suitable for carving that are not jade at all. Lots of fine carvings in serpentine were made in China before the Christian era and were described in records of the time as YU and that is why some museums contain fine art work in aventurine quartz and serpentine innocently masquerading as jade.

In presenting this information about jade in these two installments we have consulted thoroughly all of the books presently available on the subject and many that are no longer available. All of these books are in our personal library. Persons interested in the subject can obtain the following jade books from the *Desert Magazine Crafts Shop*:

The Story of Jade by Whitlock and Ehrman, \$12.50; *Jade* by Laufer (a reprint), \$12.50. Other books currently available are published in England and addresses of the publishers will be supplied if a postage paid envelope is received from the inquirer.

• • •
Dates for the annual rock and gem show of the State Mineral Society of Texas, to be held in San Antonio, have been announced for May 4, 5 and 6, 1951.

• • •
The Compton, California, Gem and Mineral club has adopted a decal which members put on windows to identify members' cars on field trips.

Gems and Minerals

VOLCANIC PELLETS IN NORTHWESTERN NEVADA

Nell Murbarger, writer for Desert Magazine and other publications, tells of finding some odd and interesting rock specimens in Lost Creek Canyon in northwestern Nevada. Describing her discovery, Miss Murbarger wrote:

"Prowling through the canyon we constantly encountered large masses of hard gray rock containing pellets of a softer gray material. While the formation appeared to be of volcanic origin, it was different from anything we had ever seen. We brought home some specimens and I submitted one of them to the Mackay School of Mines at Reno.

"Walter S. Palmer, director of the state analytical laboratory and professor of metallurgy, identified the sample as spherulite. He asked to hold the specimen until the return of Dr. Vincent P. Gianella, director of geology at the institution, who was then on vacation. Upon his return Dr. Gianella concurred in the identification.

"Spherulite is defined in Fay's *Glossary of Mining and Mineral Industry*, as a rounded or spherical aggregate not uncommonly zoned, more rarely hollow, of radiating prismatic or lath-like crystals of one or more minerals, formed in igneous rocks under certain conditions of crystallization.

"Seeking to clarify this definition for me, Jay A. Carpenter, director of Mackay's, explained that the rounded parts are not crystallized but appear to be pellets thrown out of a volcano and probably surrounded by volcanic ash which has become somewhat silicified."

OREGON CLUB READY FOR ACTIVE YEAR

Following election of new officers at the December meeting and Christmas party, the Rouge Gem and Geology club of Grants Pass, Oregon, is looking forward to an active year. Officers of the club for 1951 are:

F. J. Blattner, president; Frank Panfilio, vice president; Arline Sims, secretary-treasurer. Field trip captains are Harold Wolfe and A. F. Sims. Perry E. Fritz is publicity director, a position he filled during the past year.

During the winter months club members will have the opportunity of attending every two weeks classes in identification of minerals. Instructor is Harold Wolfe, in charge of Grants Pass office of the state department of geology and minerals. Regular monthly meetings are also being held, and the club is maintaining a display at the chamber of commerce including specimens of local material.

Hollywood Sphere is new name of the Hollywood Lapidary society's monthly bulletin, appeared for the first time on cover of the December issue. Now members are submitting designs, from which one will be chosen as official insignia of the society's bulletin.

JESSIE HARDMAN HEADS LONG BEACH SOCIETY

The club year was ended for the Long Beach, California, Mineralogical society with its annual Christmas party and potluck dinner December 13. And in order to be ready for the new year, recently-elected officers were installed to serve during 1951. New officers are:

Jessie Hardman, president; Florence Gordon, vice president; Ida Thompson, secretary, 3207 Adriatic avenue, Long Beach; Harvey W. Hawkins, treasurer; James Greene, Mamie Iandiorio and Cartee Wood, board members. Ida Thompson is also new editor of the society's bulletin. James Greene, Ralph Paul and Bill Iandiorio will handle field trips.

SAN GORGONIO SOCIETY ELECTS NEW OFFICERS

New officers for the San Geronio Mineral and Gem society, Banning, California, were elected at the December 14 meeting which was also the annual Christmas party. Heading the society during 1951 will be:

Gordon Edwards, president; James Adrian, vice president; Mrs. Beauford Hansen, secretary-treasurer.

The society is still getting reports on success of its first gem and mineral show, staged in October. Attendance was in excess of 5000 and in addition the venture was a financial success.

The Los Angeles, California, Lapidary society wants it known that visiting rockhounds are always welcome at society meetings the first Monday of each month. Meetings are held in the Van Ness playground auditorium, Second avenue and Slauson avenue, Los Angeles. The Faceteers, a branch of the L. A. L. S., meet the third Monday of each month at the same place. All gathered for a Christmas dinner and meeting in December.

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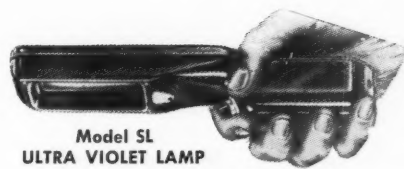
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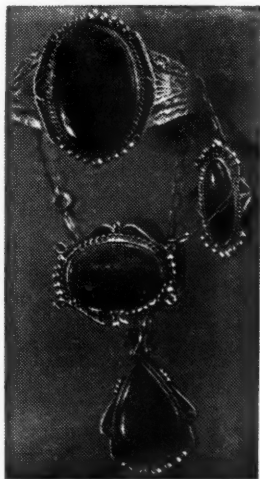
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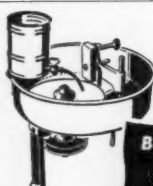
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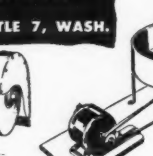
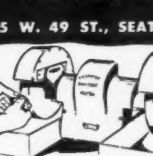
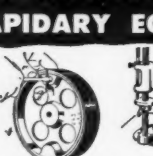
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AMONG THE ROCK HUNTERS

The property of translucency may range all the way from sub-transparency to absolute opacity, according to *The Mineralogist* for December, 1950. When approaching opacity, a mineral is said to transmit light feebly on thin edges, a property which frequently aids in the identification of a mineral.

The Ginkgo Mineral society of Wenatchee, Washington, has added to its regular activities the sponsoring of free instruction in lapidary and jewelry work. These classes are designed principally for the aid of beginners who come into the society. Allan L. Green gives the lapidary instructions in his home shop.

The Albuquerque, New Mexico, Gem and Mineral club had some interesting fall field trips. One was to the Harding mine near Dixon, a mine famous for lovely specimens of purple lepidolite, pink muscovite, microcline, amazonite, pink albite and Iceland spar, and white beryl. On a later field trip members visited Tonque wash, which has calcite geodes and fossils plus Indian artifacts. A new bed of larger geodes was discovered on the trip. Some of the geodes are more than two feet across, some completely filled with calcite, other with beautiful large single crystals—sometimes two and three different forms in the same geode.

Officers now directing affairs of the Monterey Bay Mineral society, California, are: G. H. Nelson, president; Roscoe Fussell, vice president; Beatrice Denton, secretary; Carl Becker, treasurer.

Although the December meeting of the San Jose, California, Lapidary society was the annual Christmas party, the monthly display was not neglected. Exhibitors for December were J. H. Hanson, Mrs. O. L. Heller, Dr. Gordon Helsley and C. R. Hitchcock. Scheduled to have displays in January were Bruce Holmes, Glen Holmes, Arthur Maudens and Leona Maudens.

Pictures of "Scenic Minnesota's Minerals" shown by Frank Mach and a fluorescent display by Harry Cowles were features of the December meeting of the Nebraska Mineralogy and Gem club, Omaha.

Fifty-eight members and guests enjoyed the annual Christmas party and potluck supper of the Mineral and Gem Society of Castro Valley, California, held December 8 in the cafeteria of Hayward Union high school. Several field trips are being planned by the society for the months ahead, with Director Tom Robb and Ted Saling on the committee. Al Breedon is society president.

The wearing of rings is nothing new, according to the monthly bulletin of the Delvers Gem and Mineral society, Downey, California. It is a custom that originated with the caveman who bound the wrists and ankles of the girl he most admired to keep her from running away. After civilization had advanced somewhat, the definition of a ring was at one time "a circular instrument placed on the noses of hogs and the fingers of women to restrain them and bring them into subjection." Today, some say, it works out just the opposite when a man places a ring on a girl's finger.

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NEW SEARLES LAKE OFFICERS INSTALLED

Officers for 1951 of the Searles Lake Gem and Mineral society, Trona, California, assumed their new responsibilities at the organization's annual installation banquet and Christmas party December 20 in the Trona Recreation center. Officers installed were:

Nedra Merrill, president; Dwight Sawyer, vice president; Celia Forgee, recording secretary; Alma Bliss, corresponding secretary; Eddie Redenbach, treasurer, re-elected. Members of the board of directors are: Herbert Mesmer, Bob Bostrom, Newell Merritt, Oscar Walstrom, Ralph Merrill and Modesto Leonardi.

MARICOPA LAPIDARY SOCIETY ANNOUNCES FEBRUARY SHOW

Second annual rock and gem show of the Maricopa Lapidary society will be held February 17 and 18 in the Armory at Seventh avenue and West Jefferson street, Phoenix, Arizona, it has been announced. The days are Saturday and Sunday.

Extensive plans have been made for the show, and a record number of high-quality exhibits seems assured. The February weather in Phoenix is expected to attract many visitors to that area at just the right time to see the rock and gem show.

From Mexicali, Mexico, to Santa Ana, California, and from Yuma, Arizona, to San Diego on the Pacific coast visitors came to see the first annual rock show of the Brawley, California, Mineral and Gem society. The show was held December 2 and 3 in the high school science building. Attendance topped 500. Thirty-five individuals exhibited collections of polished and unpolished specimens, rare fossils, semi-precious gems, geodes and other rocks and minerals.

In observance of the society's birthday, annual dinner party of the Sacramento, California, Mineral society has tentatively been set for March 3. The society was organized February 29, 1936—a leap year. This tentative date was announced following the November meeting, at which there was an open discussion of jade. John H. Moon opened the round table with a resumé of the mineralogy and history of jade, then Lillian Coleman talked on "The Lapidary of Jade." She had a wide variety of polished jade on display, explained her methods and results. She said that she obtains best results by never subjecting the stone to moisture during any stage of grinding or polishing.

Chrysocolla is a secondary mineral, formed by the alteration of other copper minerals, according to *Rocks and Minerals*. It occurs with other secondary copper minerals in the upper sections of copper veins. The common color is bluish-green, but this often varies to brown or black. These color variations are due to impurities such as the oxides of iron and manganese. In the pure state, chrysocolla is a hydrous silicate of copper. Fine chrysocolla specimens come from the Clifton-Morenci district, the Globe district and the Bisbee district of Arizona.

An active club year was concluded by the Mojave, California, Mineralogical society with a Christmas dinner and meeting in December. The dinner was a potluck affair. Members of the desert society have exhibited at several rock and mineral shows and went on many field trips during the past year.

PRESCOTT JUNIORS FIND PSEUDOMORPH CRYSTALS

The Junior Rockhounds of Prescott, Arizona, took a field trip on Saturday, December 9, to look for pseudomorph crystals in the Camp Verde district. The Rockhounds visited an old abandoned salt mine where salt, pseudomorphs and hollow stalagmites made of salt were found. Afterwards they continued down the road to a place where large pseudomorphs were found. Then the parties split up. Some visited Montezuma Castle, Montezuma Well, and Tuzigoot National Monument.

Those who went on the trip were: Benjie Acton, Mr. and Mrs. Harold Butcher, Geoffrey Butcher, Tertia Butcher, John Butcher, Martin Hoffman, Miss Nayan Hartfield, Mr. H. W. Proper, Lee Proper, Mrs. George Preston, George Preston, Roger Jeffs, Leland Marsh, Donnie Stanhart, Michael Jackson, Ruth Rose Le May, Carl Newtonson, Roger Sargent and Jack Hyde.

The gem and lapidary division of the San Diego Mineral and Gem society sponsored an overnight field trip December 9 and 10 to Indian Gap, 12 miles north of Ogilby, California, on the Colorado desert east of the sand dunes in Imperial County. It was a dry camp, so the rockhounds took water, food, prospector's pick, specimen bag and camping equipment. Found in the area are dumortierite, petrified palm root and wood, jasper and agate. The palm root and wood takes a fine polish, is a beautiful pink in color.

Regular meetings of the Compton, California, Gem and Mineral club are held the second Tuesday of each month at the Compton Community center. Meetings are open to anyone interested in gem and mineral collecting and lapidary work. The club's December meeting was a Christmas party and potluck dinner.

A. W. Fuessel is the new president of the San Antonio, Texas, Rock and Lapidary society, and is serving along with these officers: O. M. Striegler, vice president; Mrs. Angeline Nove, secretary; Mrs. Elizabeth Brazelton, treasurer.

A mineral specimen, wrapped as a Christmas gift, was brought by each member of the Colorado Mineral society to the December meeting and Christmas party, and everyone present received a gift from Santa. For the program, Dr. M. O. Dart showed his colored slides of mineral specimens. It was announced in the society's last bulletin that Richard M. Pearl, past president, is the first American to be elected a member of the Dutch Gem association, the Nederlandsch Genootschap voor Edelsteenkundig.

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Dendritic opal and agate specimens were collected by members of the Northern California Mineral society on the December field trip to the vicinity of Valley Springs, Calaveras County. Some outcrops there had been previously blasted and attractive material could be picked up without the use of tools. More ambitious rockhounds took picks, bars, hammers and shovels for more extensive hunting. The society's Christmas party was on December 10, regular meeting was December 12. New officers were scheduled to be elected when results of a mail ballot were counted.

Agates from all parts of the world were brought for display at December meeting of the Minnesota Mineral club, Minneapolis. Hazen Perry, who has the largest and most varied collection of agates in the Northwest, was speaker at the meeting.

Storm conditions in the Midwest forced postponement of the regular December meeting of the Western Nebraska Mineral society, Chappell, Nebraska, but the meeting was finally held on December 11. A demonstration on how to make end-sanders was given by Paul Bergstrom as feature of the program. Meetings of the society are held regularly the first Monday of each month in basement of the Chappell library, starting at 8:00 p.m. Visitors are always welcome—anyone interested in mineralogy, rocks, or lapidary.

A successful rock auction at regular December meeting of the Yavapai Gem and Mineral society, Prescott, Arizona, and a field trip on December 10 were highlights of the organization's activities as the year 1950 came to an end. The field trip, led by Ernest Michael, past president, was to several areas reached from the Black Canyon highway.

"Synthetics and their Recognition" was the topic chosen by Dr. R. M. Garrels of the department of geology of Northwestern University when he spoke at the December meeting of the Chicago Rocks and Minerals society. The society meets the second Saturday of each month at 8:00 p.m. in the Green Briar Park field house, 2650 West Peterson avenue, Chicago.

A family get-together prior to Christmas was the December meeting of the newly-organized Palo Alto Geology society. Members and their wives only attended, bringing specimens from their own collections which all studied. The society sponsored a recent two-day field trip on which members observed the geology of the Monterey County coast from Carmel, California, south for about 75 miles. Specimens gathered included crystalline limestone, garnet schist, black chert, various serpentine formations, tremolite, nephrite and talc.

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SOCIETY MEMBERS GIVEN OLD MUSKET FLINTS

Members of the Sequoia Mineral society, California, have some unusual collectors items. A former member of the society, Rev. Forest S. Eisenbise, brought back from the new State of Israel in the Middle East a quantity of flints found in an old Turkish arsenal which was uncovered during the excavations in the city of Acre. The find was in the third level below ground. Archeologists there discovered old flint-lock muskets, ball ammunition and flints for the guns. The ancient muskets came into use about 1625, which dates the find for archeologists. The flints were presented to society members at December meeting of the group.

Approximately 12 percent of the earth's surface is composed of silica (quartz), and nearly all of the semi-precious gem stones used by rockhounds are silicates of one composition or another.

H. Stanton Hill, instructor in geology and mineralogy at Pasadena City College, spent several weeks last summer in southwestern Colorado studying the geology of the area, visiting mines and mining towns and riding the last of the narrow gauge railroads which made those mountain towns accessible in the early days. A recounting of his experiences, illustrated with colored slides, made an interesting program for the December meeting of the Mineralogical Society of Southern California, Pasadena. The society meets in the lecture room of the Pasadena public library.

Fred W. Kroger, club member, at the December meeting of the Pomona Valley, California, Mineral club, gave a talk illustrated with color slides describing the ways of life and the people and mines he visited on a 7000-mile trip through Mexico. He also displayed many examples of the arts and crafts of the people of interior Mexico. The meeting was held in the chemistry building at Pomona College, Claremont, California.

An active year began in January for the Dona Ana County Rockhound club, New Mexico, with election of officers at the January 12 meeting in Mesilla Park school, and a field trip on January 21 to the Florida Mountains.

Committee chairmen and their helpers who worked for the success of the recent Orange Belt Mineralogical society gem and mineral show were presented with beautiful Kunzite crystals as a token of appreciation at the society's Christmas party and meeting December 5 in San Bernardino, California. For the program Mrs. D. H. Clark told, from a rock collector's viewpoint, of her trip last summer through 16 European countries.

Colored slides for club use were to be purchased with proceeds from the auction which was held at the annual Christmas party of the Los Angeles Gem Cutter's Guild. The party was January 6 at the home of Mr. and Mrs. Ralph Nowak, West Los Angeles. At the regular January meeting, January 22, election of officers was scheduled. The Guild meets at the Manchester playground.

There is a copper and molybdenum deposit in Stevens County, Washington, which has veins of monzonite and marble, with molybdenum, pyrite, chalcophyrite, scheelite and some quartz, it is reported by the U. S. Department of Interior.

The Compton, California, Gem and Mineral club has started a library fund and has opened a library with a starting list of 15 books and some rockhound magazines. Books will be added as finances permit. The new library will be open at Western Hobbies, 908 North Tamarind street, Compton, daily from 9:00 a.m. to 9:00 p.m. and from 9:00 a.m. to 2:00 p.m. on Sundays.

Charter members of the Colorado Springs Mineralogical society were honored at a Founders Night meeting December 8. Willard W. Wulff gave a short history of the society's beginning. This meeting also inaugurated a series of five-minute mineral lessons to help acquaint new collectors with important minerals. First lesson by Robert L. Chadbourne was on fluorite. On January 19 members of the society joined with the Ghost Town club to hear Muriel Sibell Wolle, author of *Ghost Cities of Colorado*, give an illustrated talk on "Ghosts at Timberline."

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- Sep. '48—Haunted Silver in Arizona. MAP
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- Dec. '48—Emerald Mine in Santa Rosas.
- Jan. '49—Lost Squaw Hollow Gold Ledge, Arizona.
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- Jun. '46—Agate, chalcedony, etc., Arizona. MAP
- Sep. '46—Gem onyx field, near Las Vegas, Nevada. MAP
- Oct. '46—Augite crystals, Hopi Buttes, Arizona. MAP
- Nov. '46—Petrified stumps, Painted Desert, Arizona. MAP
- Feb. '47—Indian turquoise workings, se Arizona. MAP
- Apr. '47—Wood from Petrified Hollows, s Utah. MAP
- May '47—Hauser geode beds, Black Hills, Calif. MAP
- Jul. '47—Geodes at Searchlight, Nevada. MAP
- Aug. '47—Agate, chalcedony, Fossil sprs., Arizona. MAP
- Oct. '47—Collecting crystals, Topaz mt., Utah. MAP
- Nov. '47—Petrified wood, Cedar mt., Nevada. MAP
- Apr. '48—Mudpots and obsidian, Salton Sea. MAP
- Jul. '48—Agate and chalcedony, Turtle mts., Calif. MAP
- Oct. '48—Ancient Beach pebbles, Colorado riv. MAP
- Nov. '48—Blue agate on the Mojave. MAP
- Dec. '48—Gem field in Cady Mts. MAP
- Feb. '49—Kyanite Crystals in Imperial County. MAP
- Mar. '49—Turquoise hunters have a field day. MAP
- Apr. '49—Geodes in the Kofa Country. MAP
- May '49—Geodes, Chalcedony, Southern Arizona. MAP
- Jun. '49—Jasper along Highway 60. MAP
- Jul. '49—Sandpikes on the border. MAP
- Sep. '49—Agate, jasper, on Devil's Highway. MAP
- Oct. '49—Fossils in Coyote Mountain. MAP
- Nov. '49—Apache Tears at Bagdad. MAP
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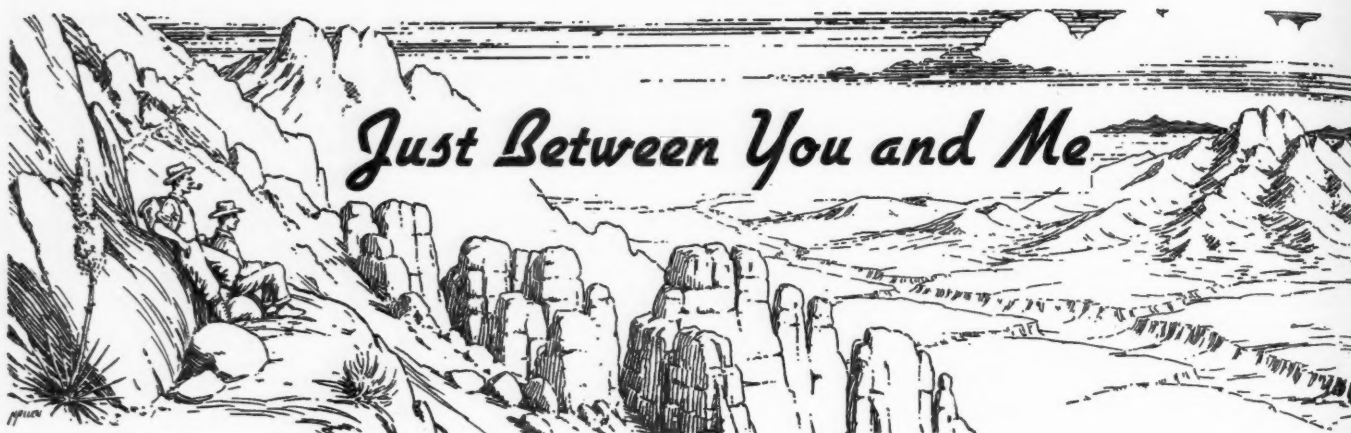
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THE *Desert* MAGAZINE

PALM DESERT, CALIFORNIA



By RANDALL HENDERSON

EDMUND C. JAEGER teaches school during the week—and when Friday evening comes he heads out into the desert to camp in a place where he may study plants and animals in their natural habitat. More than any man I know, he is at peace with the world in which he lives—and that being true he also is at peace with himself. Fortunate man!

I wish the folks who imagine that the desert crawls with venomous reptiles and stinging insects could know Edmund Jaeger better. For they would learn from him that their fears are largely the creation of their own imagination. Actually a camp in a remote desert arroyo is one of the safest places on earth. If you are not sure of that, I would remind you of the traffic casualties published by the newspapers during the Christmas and New Year holidays. Most of the things that live on the desert are in mortal fear of man. They regard him as a predatory animal, and keep as far away from him as they can. Unfortunately, that is not true of many automobile drivers.

I am indebted to Dorothy Pillsbury, author of *No High Adobe* (see January book page), for the answer to a problem which comes to this editorial desk frequently. Obviously it is inaccurate to refer to the red men and the white men in this country as Indians and Americans. They are all Americans, and the Indian has a first claim on the name. The same is true in differentiating between native born or naturalized persons of Mexican descent by referring to one as a Mexican and the other as an American. Again, both of them are Americans.

Miss Pillsbury solves the problem in her book by designating white persons of European descent as Anglos. It is a simplification of the term Anglo-Americans which I have often used. Actually, the whites in this country are not all of Anglo-Saxon descent. Nor are the Mexicans all of Latin descent. But for purposes of common usage it is a simple and clarifying answer—Indians, Mexicans and Anglos, and all of them good American citizens.

Apparently we are heading into a period of shortages and controls no less severe than during the last war. Already the mills have put the *Desert Magazine* on a paper quota. We use about five tons of book paper a month, and the quota is large enough to take care of our present needs, for which we are grateful.

Cyria and I spent our New Year's Eve in Borrego Valley listening to the tall tales of the desert's most adept liars. It was a blustery evening. There was a huge campfire, but on one side of it the wind blew smoke in our eyes, and on the other side we couldn't keep warm. But

it was fun for all that. The annual Pegleg Smith Trek in Borrego has become a sort of reunion of the old-timers on the desert. I am quite sure no one will ever find Pegleg Smith's lost gold. It would be a tragedy if they did—tragic because easily won wealth doesn't buy a grain of happiness, and the Southwest would lose one of its most colorful legends.

Across the malpais mesas bordering the Colorado River in many places one may still find well-defined trails which were the main highways of commerce and migration for the river Indians in the days before the white man came to the desert. Potsherds and chips of obsidian are picked up along these routes today.

Whenever I find one of these old trails there comes to my mind the picture of a grey-robed padre trudging along the footpath alone, or perhaps with an Indian companion. His was a life of unbelievable hardship according to present day standards—or even the standards among civilized people of his own period.

On his long treks across the desert he was dependent for food on the goodwill of the tribesmen. Sometimes the supply was scant, generally it was dirty and unpalatable. Through the extreme heat of summer and the chilled air of winter nights he traveled trails that frequently were ankle deep in dust and sand. He slept where night found him, often with only the clothes he wore, for cover. His journeys led him to remote regions where the natives had never seen a white man. He preached a doctrine that could only be regarded as heresy by the medicine men of the Indian villages. He carried a spiritual message to pagans who did not even have a written language.

But physical discomfort and danger meant nothing to Father Francisco Garces. In his eyes burned the fire of a divine faith—he must save these unredeemed souls from the fires of hell. That was all that mattered.

His was the faith that builds empires and reclaims deserts. Perhaps there are those who feel that the salvation of those unkempt river Indians was not worth the sacrifice. But to Father Garces a human soul was a human soul, whether it belonged to one clothed in purple robes, or who wore only a G-string.

I have a very high regard for the men and women who pioneered the desert — soldiers, trappers, miners, cowmen, engineers, farmers, builders and teachers—there were many fine characters among them. But in that temple of personal heroes which each of us has set up in our own inner consciousness, I place the good padre Garces above any of the others. He brought the desert the finest gifts a human can bestow on his fellowman—faith, courage and love—and gave his life as a final sacrifice.

BOOKS OF THE SOUTHWEST . . .

HIS FRIENDS ARE THE WILD THINGS OF THE DESERT

"At least once a week I go to the desert hinterlands where my roads are those made by pioneers and miners and where my companions are birds and other animals, still wild and free. They have not seen man's devilish traps and guns; they have not heard the unmusical and frightening noises of his automobile. In such places of primitive solitude I can still hear the evening calls of coyotes and see the steep trails of bighorn, or sight evidence of the badger's tenantry in numerous large holes scattered over his sprawling wilderness hunting grounds."

For 40 years Edmund C. Jaeger, head of the zoology department at Riverside College, has been making those trips into the desert. He has written much about the wildlife of the desert country, his first book on the subject being *Denizens of the Desert*, published in 1920. This volume soon became the handbook of those who go to the desert for Nature study. But the book has long been out of print—and now Jaeger has completed a new and much revised edition, *Our Desert Neighbors*, in which he writes in an informal way about his experiences with the jackrabbit, the packrat, the coyote, the canyon wren, the sidewinder and scores of birds and animals and reptiles of the desert Southwest.

Our Desert Neighbors is a fascinating book for those who like the stories of a naturalist in the field. It is a book of intimate personal experience in a world that is all about—and yet is not well known to the humans who inhabit that world.

Published by Stanford University Press, 1950. 239 pp. Index. Illustrated with photographs and drawings. \$5.00.

Autographed copies available at
Desert Crafts Shop
Palm Desert, California

Flavor All Its Own . . .

A food-preparation book with a flavor all its own, *The Good Life*, by Fabiola Cabeza de Baca Gilbert, is the story in food of the New Mexican people who are descendants of the Conquistadores and later emigrants from Mexico—and whose way of life in many respects has changed but little in the past 350 years.

The book is divided into two parts. The first tells of the New Mexicans' customs, religion, philosophy and superstitions. Of particular inter-

est is an account of their methods of collecting and using herbs. Second part of the book contains recipes of many highly-seasoned foods, along with the Spanish or Mexican name for each and menu suggestions.

Published by Willard Houghland, Sante Fe, New Mexico. 80 pp, illus., glossary and index. \$3.50.

Poetry of the Southwest . . .

More than 130 poets, many of them well known writers, have contributed to a superb anthology of Southwest verse collected and edited by Mabel Major and T. M. Pearce and published this summer by the University of New Mexico Press.

Signature of the Sun is the title of this book of poetry. The 250 poems in the volume are grouped under general headings for the convenience of the reader. Part One, under the sub-title of Hogan, Pueblo and Teepee, includes several of the most rhythmic Indian chants as well as such well known Anglo-American authors as Mary Austin, Ruth Murray Underhill and Alexander L. Posey.

The poems represent the period from 1900 to 1950, and encompass the traditions of Oklahoma, Texas, Arkansas, New Mexico and Arizona.

A brief biographical note regarding each of the contributors is included in the Appendix.

Published by University of New Mexico Press. 302 pp. with index. \$4.00.

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